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BULLETIN No. 130-73

HYDROLOGIC DATA: 1973
Volume IV: SAN JOAQUIN VALLEY

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Department of Water Resources

STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 130-73

HYDROLOGIC DATA: 1973

Volume IV: SAN JOAQUIN VALLEY

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SEPTEMBER 1974

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Secretary for Resources
The Resources Agency

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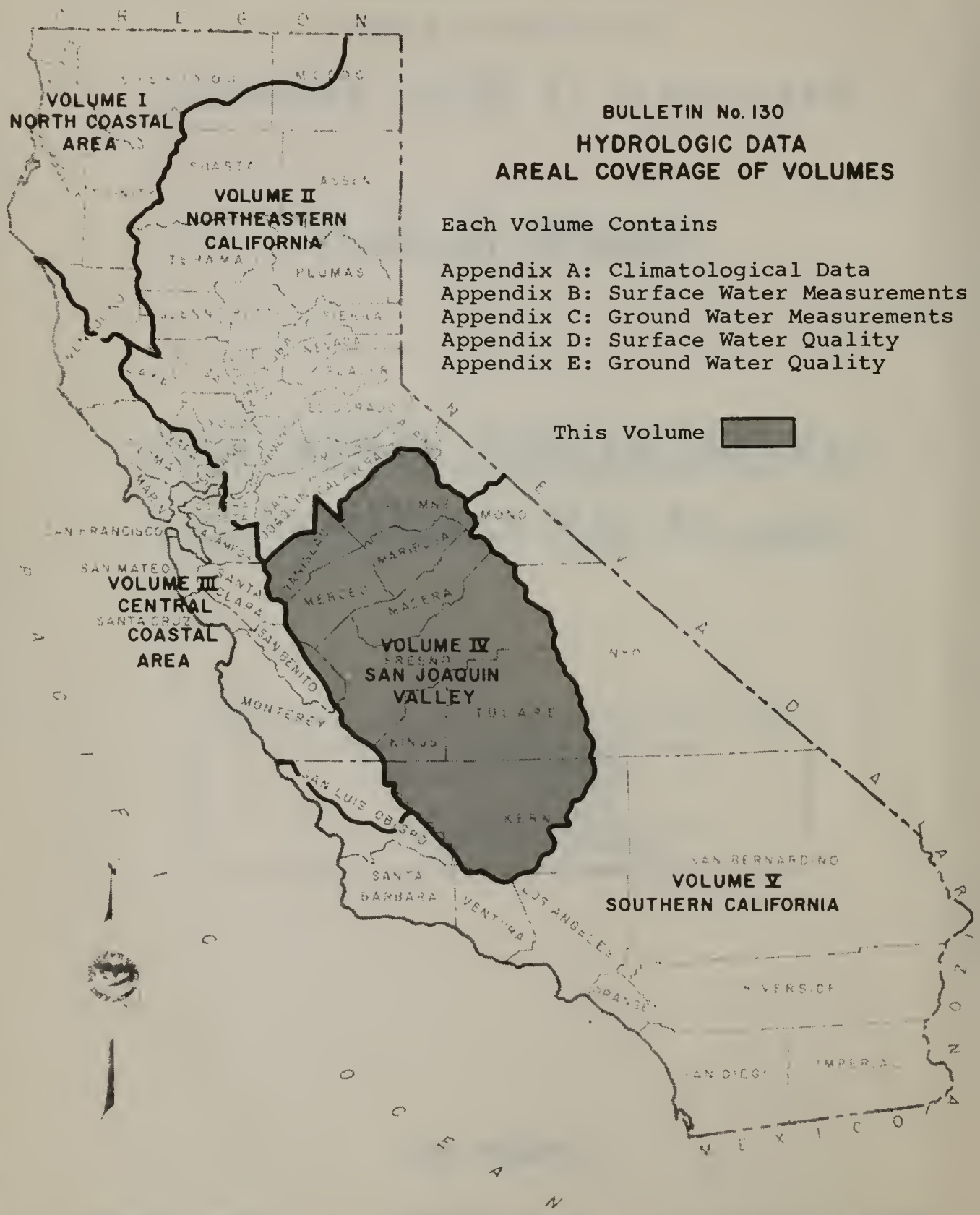
Governor
State of California

JOHN R. TEERINK
Director
Department of Water Resources



BULLETIN No. 130

HYDROLOGIC DATA
AREAL COVERAGE OF VOLUMES

Each Volume Contains

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

This Volume

FOREWORD

The data collection programs of the Department of Water Resources have been designed to supplement the activities of other agencies to satisfy specific needs of the State. Bulletin No. 130-73 presents useful, comprehensive, accurate, and timely hydrologic data which are prerequisites for monitoring environmental conditions as well as effective planning, design, construction, and operation of water facilities.

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

John R. Teerink

John R. Teerink, Director
Department of Water Resources
State of California
July 29, 1974

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)	1.699	Cubic meters per minute
1 part per million (ppm)	Milligram per liter (mg/l)	
1 part per billion (ppb)	Microgram per liter (ug/l)	
1 part per trillion (ppt)	Nanogram per liter (ng/l)	
1 equivalent per million (epm)	Milliequivalent per liter (me/l)	
Degrees Fahrenheit (°F)	Degrees Celsius (°C) = (°F-32°)5/9	

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2 Map of Selected Ground Water Areas in San Joaquin Valley and Profiles Along Section A-A' Showing Ground Water Levels in 1921, 1951 and 1973

3 Lines of Equal Elevation of Water in Wells, San Joaquin Valley, Spring 1973

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

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

State of California
The Resources Agency
Department of Water Resources

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

This report prepared under the direction of
ROBERT G. EILAND, Deputy Director

by the

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ın W. Masier . . . . . Chief, Planning and Investigations Branch

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Reviewed and coordinated by Division of Resources Development,
Environmental Quality Branch
Water Resources Evaluation Section

ACKNOWLEDGMENTS

In the collection of data for this bulletin, the Department has been aided by various public and ate agencies and by many private citizens. This cooperation is gratefully acknowledged, and it is cially fitting to commend the following agencies:

National Weather Service

U. S. Bureau of Reclamation

U. S. Army Corps of Engineers

U. S. Geological Survey

State Department of Health

City and County of San Francisco

City of Modesto

Kern County Water Agency

Kern County Canal and Water Company

Buena Vista Water Storage District

Modesto Irrigation District

Turlock Irrigation District

Oakdale Irrigation District

Merced Irrigation District

Fresno Irrigation District

Kings River Water Association

Central California Irrigation District

Tule River Association

Fresno County Health Department

Kern County Health Department

Tulare County Health Department

Kern County Parks and Recreation Department

ABSTRACT

Report contains tables showing data on climate, surface water flow, ground water levels, and surface and ground water quality in the San Joaquin Valley for the 1972-73 water year. Figures show location of climatological, surface water, and surface water quality measurement stations; fluctuation of water levels in selected wells and areas; and electrical conductance at selected stations. Plates show lines of equal elevation of water in wells, spring 1973; profile of ground water levels; ground water areas; and well locations.

APPENDIX A

CLIMATOLOGICAL DATA

INTRODUCTION

This appendix summarizes monthly precipitation data in the San Joaquin Valley from July 1, 1972, to September 30, 1973, for stations which are not published by the National Weather Service. Also presented are annual precipitation values from 32 storage gages.

Figure A-1 shows the general location of all climatological observation stations in the San Joaquin Valley for which data are available in department files or files of the National Weather Service.

Table A-1 presents an explanation of column headings and code symbols used, and an index of climatological stations as shown on Figure A-1.

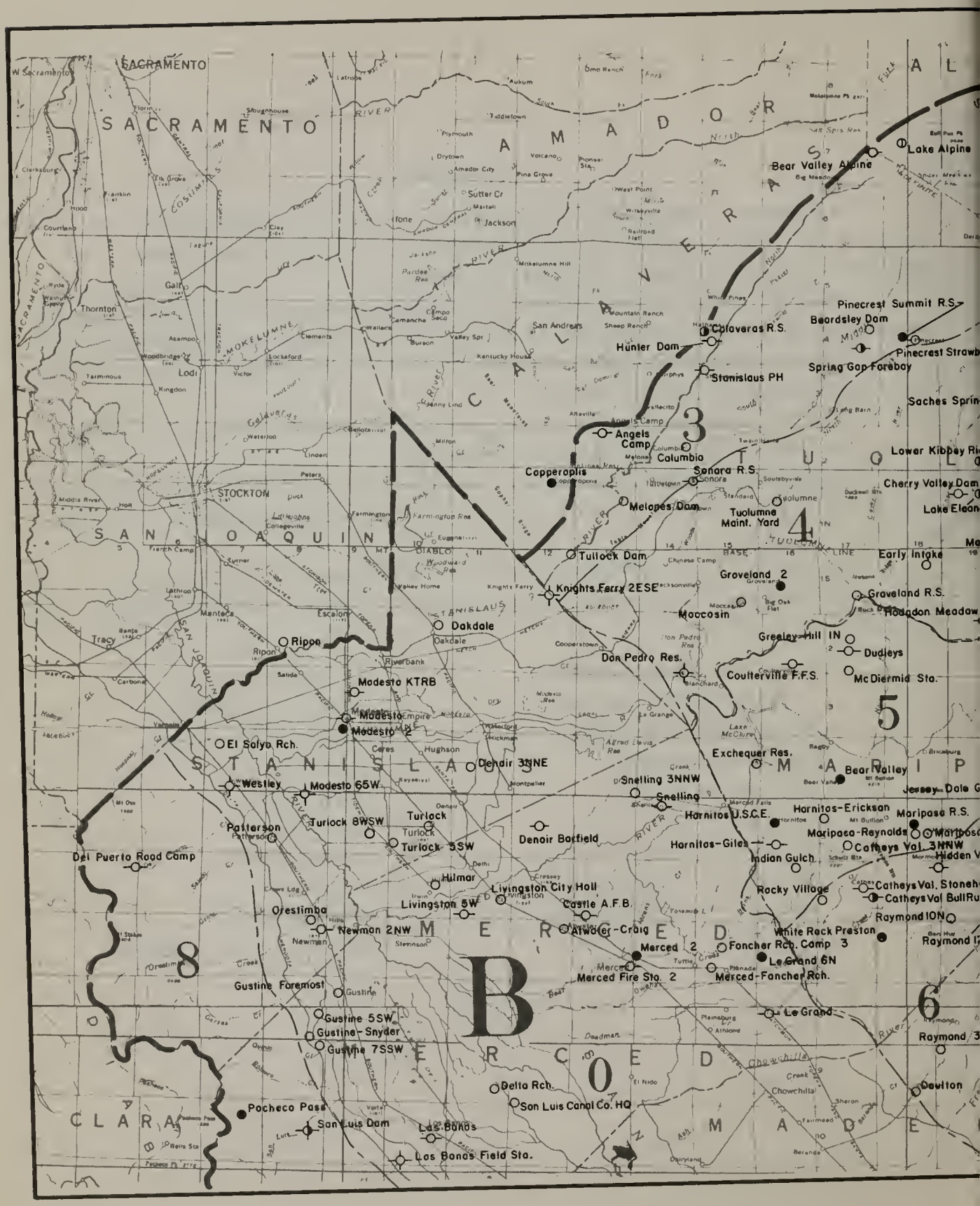
Table A-2 presents monthly precipitation data on 152 of the stations shown in the index.

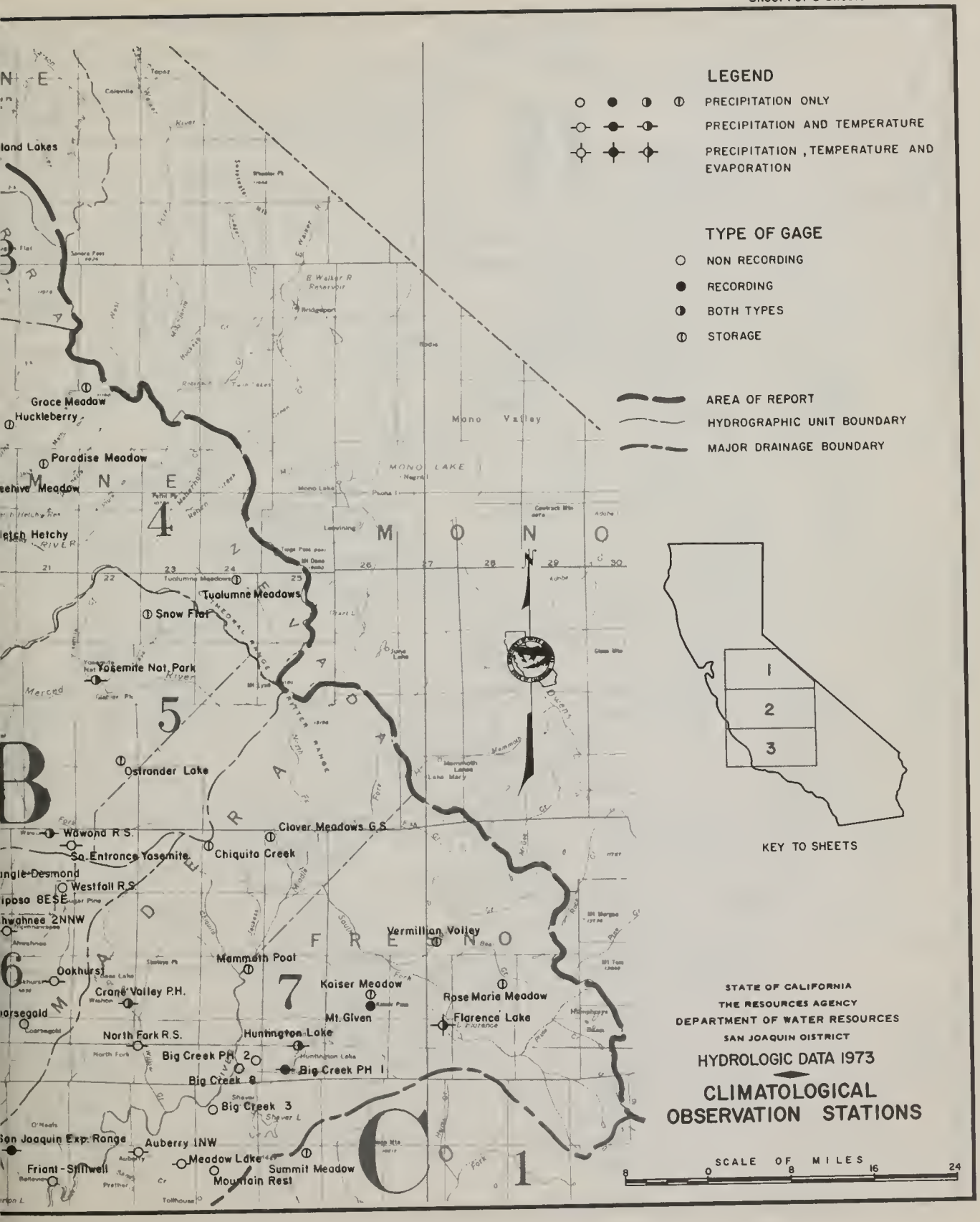
Table A-3 presents storage gage precipitation data.

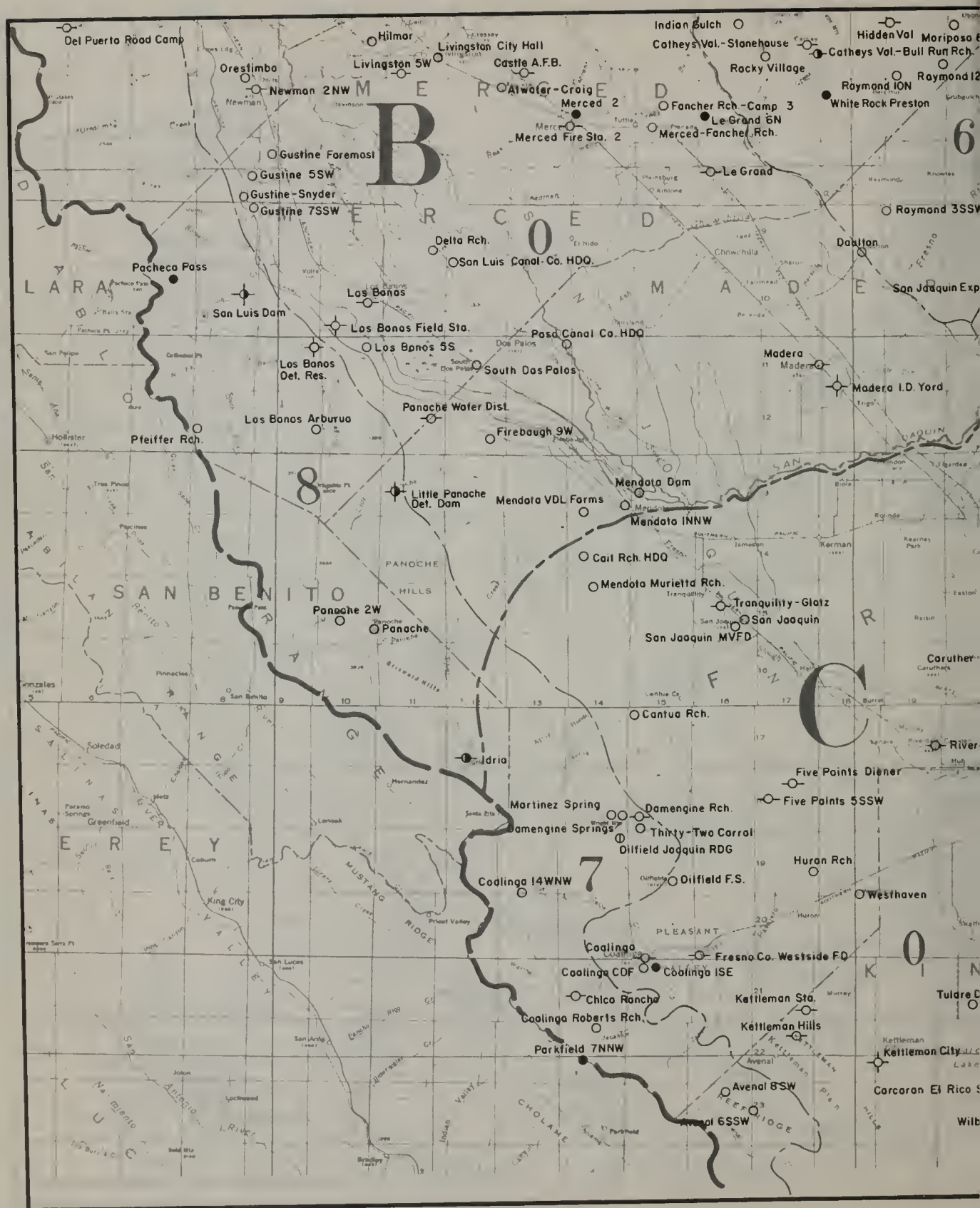
Precipitation data for stations shown in the index as still active and not published in this appendix are either published by the National Weather Service, or were not available at time of this publication.

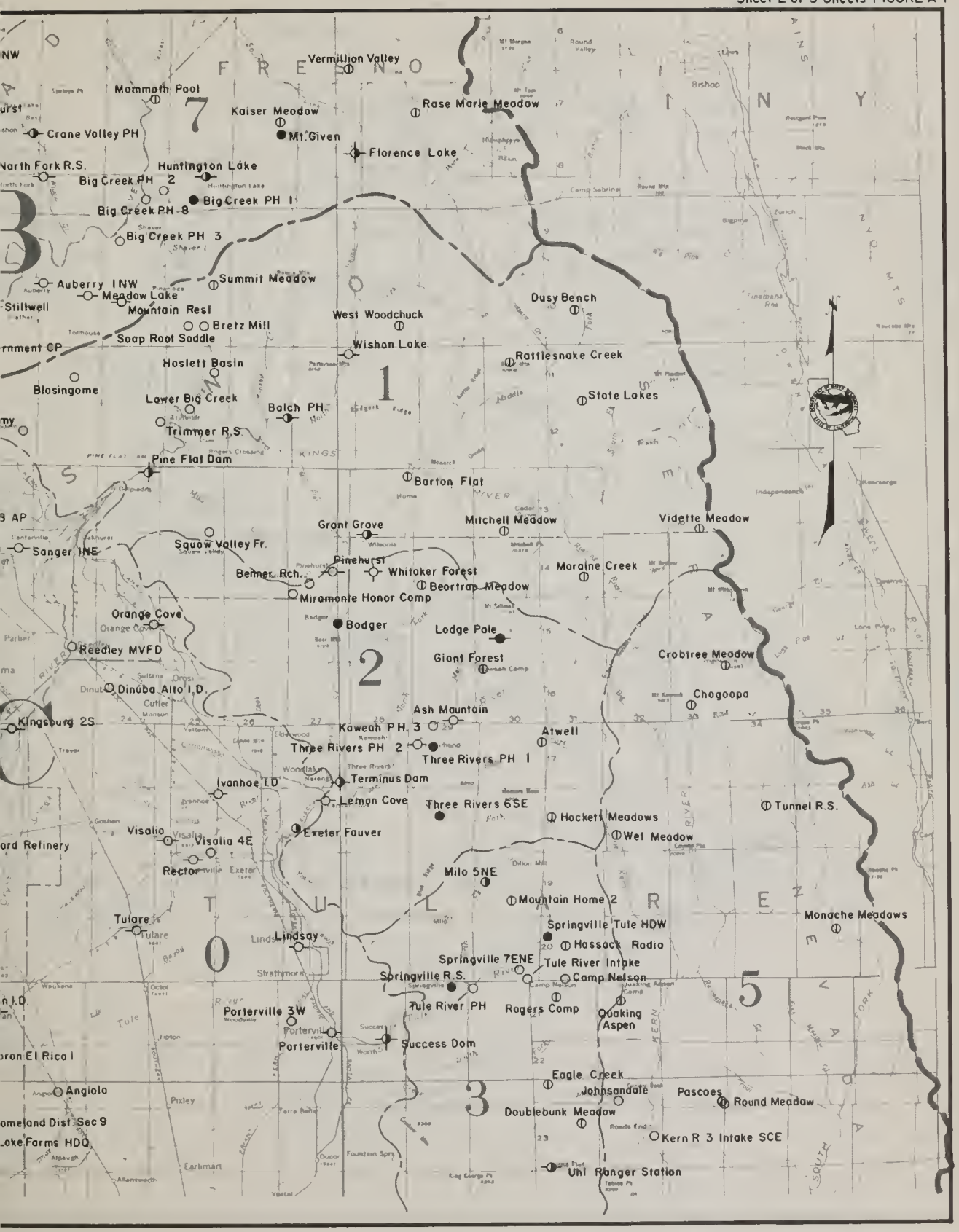
Each station in this appendix has been assigned an identification number. The first two digits denote the drainage basin as shown below. The remaining digits denote the alphabetical sequence of the station.

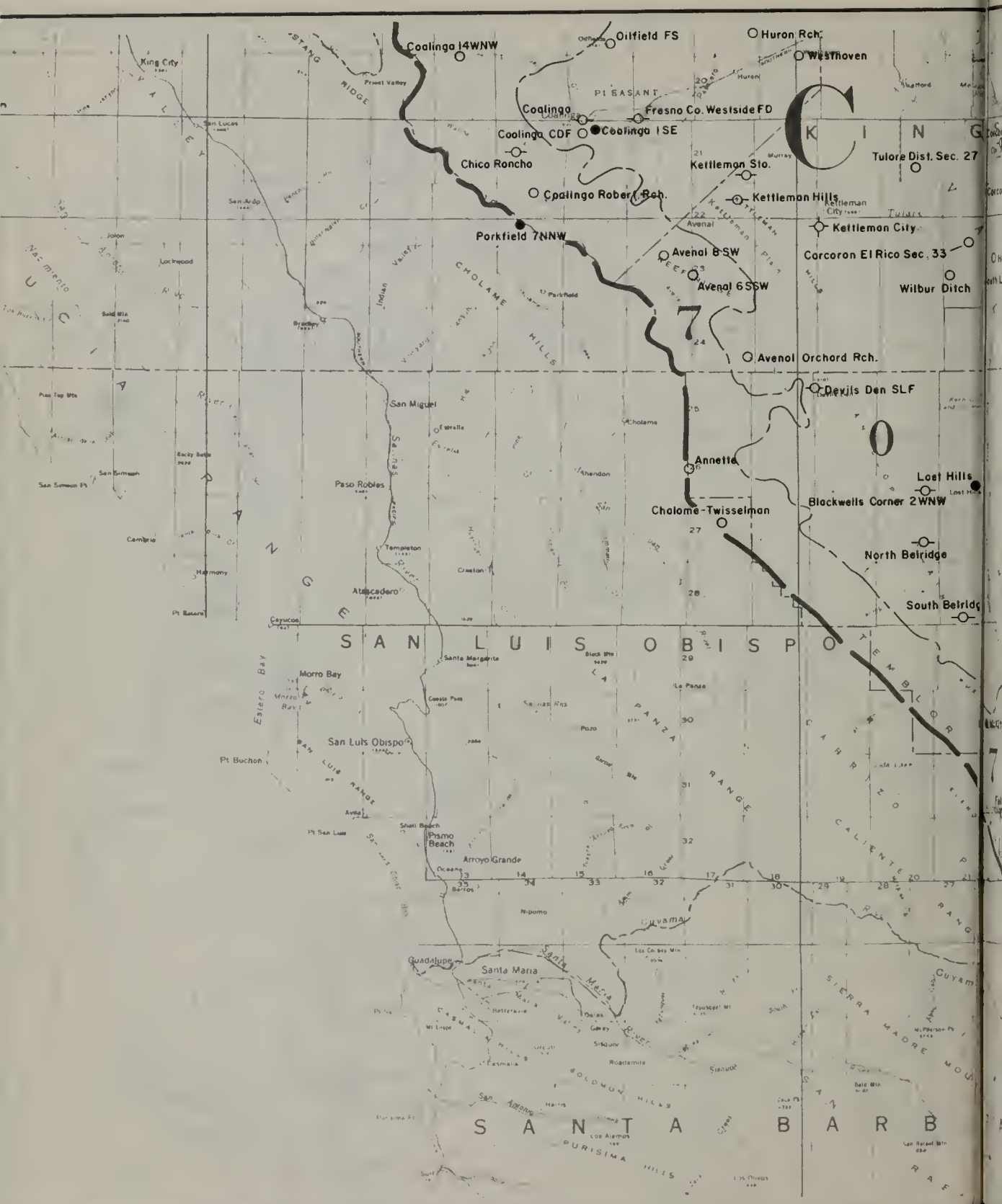
HYDROGRAPHIC AREA B SAN JOAQUIN RIVER BASIN	HYDROGRAPHIC AREA C TULARE LAKE DRAINAGE BASIN
B0 - San Joaquin Valley Floor	C0 - Tulare Lake Valley Floor
B3 - Stanislaus River	C1 - Kings River
B4 - Tuolumne River	C2 - Kaweah River
B5 - Merced River	C3 - Tule River
B6 - Fresno-Chowchilla Rivers	C4 - Greenhorn Mountains
B7 - San Joaquin River	C5 - Kern River
B8 - San Joaquin Valley on West Side	C6 - Tehachapi Mountains
	C7 - Tulare Lake Basin on West Side


SACRAMENTO
SACRAMENTO
AMADOR
CALAVERAS
TUOLUMNE
SAN JOAQUIN
STANISLAUS
MERCED
MADERA
FRESNO
CLARA
Lake Alpine
Bear Valley Alpine
Pinecrest Summit R.S.
Beardsley Dam
Calaveras R.S.
Hunter Dam
Stanislaus PH
Spring Gap Foreboy
Angels Camp
Columbia
Sonora R.S.
Copperopolis
Melones Dam
Tuolumne Maint. Yard
Tullock Dam
Knights Ferry 2ESE
Groveland 2
Groveland R.S.
Early Intake
Moccasin
Greeley Hill IN
Dudleys
Don Pedro Res.
Coutterville F.F.S.
McDiermid Sta.
Dakdale
Ripon
Modesto KTRB
Modesto
El Solyo Rch.
Denair 3NNE
Westley
Modesto 65W
Snelling 3NNW
Snelling
Exchequer Res.
Bear Valley
Hornitos U.S.C.E.
Hornitos-Erickson
Mariposa R.S.
Mariposa-Reynolds
Catheys Val. 3NNW
Hornitos-Giles
Indian Gulch
Rocky Village
Patterson
Turlock 8WSW
Turlock
Turlock 5SW
Denair Bartfield
Del Puerto Road Camp
Hilmar
Livingston City Hall
Livingston 5W
Castle A.F.B.
Orestimba
Newman 2NW
Atwater-Craig
White Rock Preston
Raymond 10N
Merced 2
Fancher Rch. Camp 3
Le Grand 6N
Merced Fire Sta. 2
Merced-Fancher Rch.
Gustine Foremost
Gustine 5SW
Gustine-Snyder
Gustine 7SSW
Le Grand
Raymond 3
Delta Rch.
San Luis Canal Co. HQ
Pacheco Pass
San Luis Dam
Las Banos
Las Banos Field Sta.
Chowchilla
Daulton
3
4
5
6
8


LEGEND
PRECIPITATION ONLY
PRECIPITATION AND TEMPERATURE
PRECIPITATION, TEMPERATURE AND EVAPORATION
TYPE OF GAGE
NON RECORDING
RECORDING
BOTH TYPES
STORAGE
AREA OF REPORT
HYDROGRAPHIC UNIT BOUNDARY
MAJOR DRAINAGE BOUNDARY
KEY TO SHEETS
1
2
3
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT
HYDROLOGIC DATA 1973
CLIMATOLOGICAL OBSERVATION STATIONS
SCALE OF MILES
8 0 8 16 24
Grace Meadow
Huckleberry
Paradise Meadow
Tuolumne Meadows
Snow Flat
Yosemite Nat. Park
Ostrander Lake
Wawona R.S.
Sa. Entrance Yosemite
Clover Meadows G.S.
Chiquito Creek
Westfall R.S.
Vermillion Valley
Mammoth Pool
Oakhurst
Crane Valley P.H.
Kaiser Meadow
Rose Marie Meadow
Mt. Given
Florence Lake
North Fork R.S.
Huntington Lake
Big Creek PH 2
Big Creek PH 1
Big Creek 8
Big Creek 3
Auberry INW
Meadow Lake
Summit Meadow
Mountain Rest
Friant-Stillwell
Mono Valley
MONO LAKE
M O N O
F R E S N O
M A D E R A
4
5
6
7
1


Del Puerto Road Camp
Hilmor
Livingston City Hall
Livingston 5W
Castle A.F.B.
Orestimbo
Newman 2NW
Atwater-Craig
Merced 2
Merced Fire Sta. 2
Indian Gulch
Catheys Val.-Stonehouse
Rocky Village
Hidden Val
Catheys Val.-Bull Run Rch.
Raymond 10N
White Rock Preston
Fancher Rch.-Camp 3
Le Grand 6N
Merced-Fancher Rch.
Le Grand
Gustine Foremost
Gustine 5SW
Gustine-Snyder
Gustine 7SSW
Raymond 3SSW
Delta Rch.
San Luis Canal Co. HDQ.
Dalton
Pacheco Pass
San Luis Dam
Los Banos
Los Banos Field Sta.
Los Banos 5S
Los Banos Det. Res.
Poso Canal Co. HDQ
South Dos Palos
Madera
Madera I.D. Yard
San Joaquin Exp
Panoche Water Dist.
Los Banos Arburua
Firebaugh 9W
Pfeiffer Rch.
Hollister
Little Panoche Det. Dam
Mendota VDL Farms
Mendota Dam
Mendota 1NNW
Cait Rch. HDQ
Mendota Murietta Rch.
Tranquility-Glotz
San Joaquin
San Joaquin MVFD
Panoche 2W
Panoche
Caruthers
Cantua Rch.
Idria
Five Points Diener
Five Points 5SSW
Martinez Spring
Damengine Rch.
Damengine Springs
Thirty-Two Corral
Oilfield Joaquin RDG
Huron Rch
Coalinga 14WNW
Oilfield F.S.
Westhaven
Coalinga
Fresno Co. Westside FD
Coalinga CDF
Coalinga ISE
Chico Rancho
Kettleman Sta.
Coalinga Roberts Rch.
Kettleman Hills
Parkfield 7NNW
Kettleman City
Avenal 8SW
Avenal 6SSW
Corcoran
El Rico
Soledad
Greenfield
King City
Tulare
Wilb
SAN BENITO
MONTEREY
FRESNO
KINGS
TULARE
MADERA
MERCED
PANOCHE HILLS
PLEASANT VALLEY
MUSTANG RIDGE
CHOLAME
KETTLEMAN HILLS
6
7
8


Vermillion Valley
Mammoth Pool
Kaiser Meadow
Rose Marie Meadow
Crane Valley PH
Mt Given
Florence Lake
North Fork R.S.
Huntington Lake
Big Creek PH 2
Big Creek PH 1
Big Creek PH 8
Big Creek PH 3
Auberry INW
Summit Meadow
Meadow Lake
Mountain Rest
Bretz Mill
Soap Root Saddle
West Woodchuck
Dusy Bench
Wishon Lake
Rattlesnake Creek
Hoslett Basin
Blosingome
Lower Big Creek
Balch PH
State Lakes
Trimmer R.S.
Pine Flat Dam
Barton Flat
Grant Grove
Mitchell Meadow
Vidette Meadow
Squaw Valley Fr.
Sanger INE
Pinehurst
Whitoker Forest
Moraine Creek
Beartrap Meadow
Miramonte Honor Comp
Orange Cove
Bodger
Lodge Pole
Reedley MVFD
Giant Forest
Crobtree Meadow
Dinuba Alto I.D.
Chogoopa
Ash Mountain
Kingsburg 2S
Kaweah PH. 3
Atwell
Three Rivers PH 2
Three Rivers PH 1
Ivanhoe I.D.
Terminus Dam
Lemon Cove
Three Rivers 6SE
Tunnel R.S.
Hocket Meadows
Visalia
Exeter Fauver
Wet Meadow
Visalia 4E
Rectorville
Milo 5NE
Mountain Home 2
Tulare
Monache Meadows
Springville Tule HDW
Lindsay
Hassack Rodia
Springville 7ENE
Tule River Intake
Springville R.S.
Camp Nelson
Tule River PH
Rogers Comp
Quaking Aspen
Porterville 3W
Porterville
Success Dam
Eagle Creek
Johnsondale
Pascoes
Round Meadow
Angiolo
Doublebunk Meadow
Kern R 3 Intake SCE
Uhl Ranger Station
Pixley
Earlimart
Tulare
Lindsay
Porterville
Angiolo
Bishop
Round Valley
Camp Sabrina
Zurich
Independence
Lone Pine
Dinuba
Cutler
Orosi
Woodlake
Exeter
Visalia
Strathmore
Waukena
Ducor
Terra Bella
Alpaugh
Allensworth
Fountain Spring
Tipton
Woodville
Pinehurst
Wilsonia
Cantua Creek
Cantua Creek
Lemoore
Hanford
Corcoran
Kettleman City
Avenal
Coalinga
Lost Hills
Taft
Maricopa
Wasco
Shafter
Delano
Lamont
Arvin
Bakersfield
Kern
Tule
Kings
Fresno
Tulare
Kern
Mono
Inyo
Madera
Mariposa
Tuolumne
Calaveras
Stanislaus
Merced
Mono
Inyo
Kern
Tulare
Fresno
Kings


Coalinga 14WNW
Oilfield FS
Huron Rch.
Westhoven
King City
Priest Valley
PLEASANT
Coalinga
Fresno Co. Westside FD
Coalinga CDF
Coalinga 1SE
Chico Roncho
Kettleman Sto.
Tulare Dist. Sec. 27
Coalinga Robert Rch.
Kettleman Hills
Kettleman City
Porkfield 7NNW
Avenal 8SW
Corcoran El Rico Sec. 33
Avenal 6SSW
Wilbur Ditch
CHOLAME HILLS
Avenal Orchard Rch.
Devils Den SLF
San Miguel
Annette
Lost Hills
Paso Robles
Blackwells Corner 2WNW
Cholome-Twisselman
North Belridge
Atascadero
South Belridge
S A N L U I S O B I S P O
Morro Bay
San Luis Obispo
Pt Buchon
Pismo Beach
Arroyo Grande
Guadalupe
Santa Maria
S A N T A B A R B

Mountain Home 2
Springville Tule HDW
Monache Meadows
Hossock
Springville 7ENE
Tule River Intake
Springville RS
Camp Nelson
Tule River PH
Rogers Camp
Quaking Aspen
Tulare
Lindsay
Porterville 3W
Porterville
Success Dam
Angiolo
Eagle Cr.
Johnsondale
Poscoes
Round Meadow
Deer Creek Rch.
Doublebunk Meadow
Kern R. 3 Intake SCE
Fountain Springs F.S.
Unit Ranger Sta.
Vestal
Posey 3E
Portuguese Meadow
Kern River P.H. 3
Delano
Delano Gov't. Comp
Glenville
Glenville Fulton R.S
Woody
Wofford Heights
Onyx
Weldon IWSW
Isabella Dam
Poso Rch.
Wasco
Ten High Mine
Poso Creek Rch.
U.S. Cotton Field SI
Kern River P.H. No. 1
Roseddale
Kern Canyon
Bakersfield WB AP
BAKERSFIELD
Buttonwillow
Bakersfield IW
Walker Basin
Bueno Vista Rch.
Magunden
Bellevue
Lorraine
Old River 3W
DiGiorgio
Bueno Vista M&L 2
Bueno Vista Rch. M&L
Arvin
Keene
Toft KTKR Radio
Gin Yard
Toft
Tulefield
Tehachopi Airport
Tehachopi
Eighth Standard Rd.
Moricopa
Santiago Rch.
Moody Rch.
Cummings Valley 2
Moricopa F.S.
Pattiwoy
Citrus
Tejon Rancho
San Emigdio Rch.
Edmonston P.P.
Mil Potrero
Lebec
Chuchapate R.S.
VENTURA
ANTELOPE VALLEY
Lancaster
Mojave
Rosamond
Lake
Elizabeth L.
Lake Hughes
Stauffer
Lebec
Tejon Pass
Grapevine
Wheeler Ridge
Cummings Mts
Lake Mts
Lebec Mts
Alamo Mts
Sawmill Mts
Lake Mts
Tehachapi Mts
Tehachapi
Monolith
Lamont
Weed Patch
Arvin
Caliente
Greenhorn Mts
Sierra Nevada
Kern River
Poso Creek
Tule River
Kern Canyon
Shafter
McFarland
Delano
Earlimart
Pixley
Porterville
Lindsay
Tulare
Strathmore
Woodville
Tipton
Ducor
Fountain Springs
Alpaugh
Allensworth
Richgrove
Jovista
Ventucopa
Mil Pines
Tupman
Taft
Maricopa
Lamont
Caliente
Tejon Pass
Grapevine
Wheeler Ridge
Cummings Mts
Lake Mts
Lebec Mts
Alamo Mts
Sawmill Mts
Lake Hughes
Elizabeth L.
Lancaster
Mojave
Rosamond
Lake
Stauffer
Lebec

TABLE A-1

INDEX OF CLIMATOLOGICAL STATIONS

An explanation of the column headings and code symbols used in connection with this table follows:

40-Acre Tract. This denotes the location of the station within the section in which it is located. The letter code is derived from the following diagram:

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

Base and Meridian. The code for this column is as follows:

M - Mount Diablo Base and Meridian

S - San Bernardino Base and Meridian

Cooperators' Numbers. These numbers are assigned from the following list:

000 -	Private Cooperators
001 - 399	Private Agencies
001	Kern County Land Company
002	Boswell Company
003	P. G. and E. Company
004	Southern California Edison Company
005	California Electric Power Company
010	Amateur Radio Weather Network KTRB
011	Southern Pacific Transportation Company
012	Miller and Lux, Inc.
013	Central California Irrigation District
400 - 799	Counties and municipalities
401	Hetch Hetchy Water Supply
404	Oakdale Irrigation District
405	City of Los Angeles, Department of Water & Power
420	Stanislaus County
800 - 899	State
801	Pomology Department, University of California, Davis
804	Division of Beaches and Parks
805	State Department of Fish and Game
806	Department of Water Resources
808	Division of Forestry
809	Division of Highways

TABLE A-I (Cont.)

814	University of California, Davis, Westside Field Station
815	University of California, School of Forestry
900 - 999	Federal
900	National Weather Service
902	U. S. Air Force, Air Weather Service
903	U. S. Army Corps of Engineers
904	U. S. Bureau of Reclamation
905	U. S. Forest Service
906	U. S. Department of Agriculture, Agricultural Research Service
907	National Weather Service (State Climatologist)
916	U. S. Geological Survey

Cooperators' (Coop) Index Numbers. These are the numbers assigned to the stations by the agencies responsible for handling the station records. With few exceptions, the alpha order numbers assigned to the National Weather Service stations are the same as those used by the National Weather Service. The National Weather Service station number is shown in this column only when it differs from the alpha order number.

Record Began. This is shown to year only.

Record Ended. If record continues this column is left blank.

Years Missing. This denotes missing record to the nearest full year.

County Code. Numbers used to designate specific counties are listed below:

Alpine	02
Calaveras	05
Fresno	10
Inyo	14
Kern	15
Kings	16
Madera	20
Mariposa	22
Merced	24
San Benito	35
San Joaquin	39
San Luis Obispo	40
Stanislaus	50
Tulare	54
Tuolumne	55
Ventura	56

TABLE A-1 (Cont.)

INDEX OF CLIMATOLOGICAL STATIONS

SAN JOAQUIN VALLEY

Station Number	Station Name	Elevation (in Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude °	Latitude '	Latitude "	Longitude °	Longitude '	Longitude "	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
C1 0009	ACADEMY	545	SEC 14	T12S	R22E	P	M	36	52	58	119	32	25	000		1958	1970		10
B6 0049	AHWAHNEE 2 NNW	2680	SEC 24	T06S	R20E		M	37	23	22	119	44	07	907		1959			20
C0 0204	ANGIOLA	205	SEC 27	T22S	R23E	D	M	35	59	25	119	28	42	900		1899			54
B3 0209	ANGELS CAMP	1535	SEC 34	T03N	R13E	E	M	38	04	20	120	32	18	003		1908			05
C7 0215	ANNETTE	2140	SEC 19	T26S	R17E	R	M	35	38	48	120	10	12	000		1952			15
C0 0332	ARVIN	445	SEC 23	T31S	R29E		M	35	12	00	118	49	00	000		1936			15
C2 0343	ASH MOUNTAIN	1708	SEC 34	T16S	R29E	L	M	36	29	30	118	49	35	900		1925			54
B0 0373-80	ATWATER CRAIG	150	SEC 02	T07S	R12E		M	37	21		120	37		000		1961	1969		24
C2 0374	ATWELL	6400	SEC 12	T17S	R30E		M	36	28	00	118	40	00	900		1948			54
B7 0379	AUBERRY 1 NW	2010	SEC 06	T10S	R23E	A	M	37	05	40	119	29	50	900		1915			10
C0 0399	AVENAL ORCHARD RCH	712	SEC 25	T24S	R17E	P	M	35	48	23	120	05	18	000		1919			16
C7 0399-01	AVENAL 8 SW	1424	SEC 03	T23S	R16E	G	M	35	57	33	120	13	25	000		1957			16
C7 0399-02	AVENAL 6 SSW	1565	SEC 18	T23S	R17E	K	M	35	55	30	120	10	05	000		1953			16
C2 0422	BADGER	3030	SEC 11	T15S	R27E	P	M	36	37	53	119	00	46	900		1940			54
C0 0440	BAKERSFIELD 1 W	400	SEC 26	T29S	R27E	H	M	35	22	41	119	02	17	900		1913	1969		15
C0 0442	BAKERSFIELD WB AP	494	SEC 02	T29S	R27E	Q	M	35	25	38	119	02	34	900		1933			15
C1 0449	BALCH POWERHOUSE	1720	SEC 12	T12S	R26E	B	M	36	54	33	119	05	15	900		1921			10
C1 0534	BARTON FLAT	3760	SEC 01	T13S	R28E		M	36	49		118	53		900		1961			10
B3 0569-60	BEAR VALLEY ALPINE	7100	SEC 18	T07N	R18E	E	M	38	27	45	120	02	30	000		1967			02
B5 0570-80	BEAR VALLEY	2600	SEC 20	T04S	R17E		M	37	34		120	07		903		1960			22
B3 0573	BEARDSLEY DAM	3164	SEC 14	T04N	R17E		M	38	12	12	120	04	30	404		1959			55
C2 0596	BEARTRAP MEADOW	6800	SEC 29	T14S	R29E		M	36	41	00	118	52	00	900		1959			54
B4 0617	BEEHIVE MEADOW	6500	SEC 28	T02N	R20E		M	38	00	00	119	47	00	900		1947	1971		55
C0 0631	BELLEVUE	369	SEC 07	T30S	R27E	B	M	35	20	11	119	05	27	001		1961	1969		15
C1 0676	BENNER RANCH	3525	SEC 27	T14S	R27E	C	M	36	41	05	119	01	50	000		1967			10
B7 0755	BIG CREEK PH 1	4930	SEC 28	T08S	R25E	J	M	37	12	15	119	14	20	900		1915			10
B7 0755-01	BIG CREEK PH 2	3000	SEC 25	T08S	R24E	N	M	37	11	59	119	18	19	004		1913			10
B7 0755-02	BIG CREEK PH 3	1400	SEC 17	T09S	R24E	E	M	37	08	54	119	23	00	004		1922			10
B7 0755-05	BIG CREEK PH 8	2260	SEC 27	T08S	R24E	G	M	37	12	00	119	20	00	004		1921			10
C0 0875	BLACKWELLS CORNER 2 WNW	710	SEC 35	T26S	R19E	L	M	35	37	15	119	53	40	900		1944		13	15
C1 0880-80	BLASINGAME	1050	SEC 22	T11S	R23E		M	36	57	37	119	26	45	808		1961			10
C1 1069-11	BRETZ MILL	3250	SEC 27	T10S	R25E	D	M	37	02	18	119	14	24	905		1960	1967		10
C0 1174	BUENA VISTA RCH	310	SEC 04	T30S	R25E	R	M	35	21	00	119	19	00	001		1944	1969		15
C0 1175	BUENA VISTA RCH M&L	290	SEC 28	T31S	R26E	N	M	35	11	42	119	11	43	002		1955			15
C0 1175-80	BUENA VISTA RCH M&L 2	290	SEC 08	T31S	R25E	R	M	35	14	25	119	18	23	002		1962			15
C0 1244	BUTTONWILLOW	270	SEC 24	T29S	R23E	K	M	35	24	00	119	28	00	900		1940			15
B3 1280	CALAVERAS RANGER STA	3343	SEC 18	T04N	R15E	L	M	38	11	50	120	21	55	900		1944			05
C3 1425	CAMP NELSON	4560	SEC 32	T20S	R31E	R	M	36	08	17	118	37	36	000		1959	1970		54
C0 1490	CANTUA RANCH	295	SEC 06	T17S	R15E	N	M	36	28	35	120	23	20	000		1955			10
C0 1557	CARUTHERS 4 E	265	SEC 14	T16S	R20E	B	M	36	32	48	119	45	30	000		1960	1971		10
B0 1580	CASTLE A F B	170	SEC 32	T06S	R13E	L	M	37	22	03	120	34	20	902		1951			24
B6 1588	CATHEYS VAL BULLRUN R	1425	SEC 34	T06S	R17E	H	M	37	23	56	120	03	08	900		1940			22
B5 1588-03	CATHEYS VALLEY 3 NNW	1250	SEC 28	T05S	R17E	B	M	37	28	33	120	06	33	000		1957			22
B6 1591	CATHEYS VAL STONEHOUSE	1210	SEC 14	T06S	R17E	M	M	37	24	30	120	05	00	000		1951	1970		22
C5 1647	CHAGOOPA	10390		T16S	R33E		M	36	30		118	27		901		1964	1972		54
B4 1697	CHERRY VALLEY DAM	4765	SEC 05	T01N	R19E	L	M	37	58	00	119	55	00	900		1955			55
C7 1716-20	CHICO RANCHO	1350	SEC 20	T21S	R14E	M	M	36	05	13	120	29	22	000		1969			10
B7 1737	CHIQUITO CREEK	7290	SEC 07	T05S	R24E	N	M	37	30	20	119	23	21	900		1961			20
C7 1743-02	CHOLAME TWISSELMAN	1675	SEC 15	T27S	R17E	R	M	35	35	00	120	07	00	000		1951			40
C6 1754	CHUCHAPATE R S	5260	SEC 04	T08N	R20W		S	34	48	00	119	01	00	900		1941			56
C0 1770-80	CITRUS	660	SEC 13	T11N	R20W	M	S	35	02	18	118	58	28	001		1963	1969		15
B7 1844	CLOVER MEADOWS	7002	SEC 06	T05S	R25E		M	37	32		119	17		900		1946	1972		20
C0 1864	COALINGA	671	SEC 32	T20S	R15E	P	M	36	09	00	120	21	00	900		1942			10
C7 1864-02	COALINGA ROBERTS RCH	1350	SEC 03	T22S	R14E	R	M	36	02	18	120	26	40	000		1953			10
C0 1867	COALINGA 1 SE	663	SEC 04	T21S	R15E	J	M	36	07	39	120	20	38	900		1911			10
C7 1869	COALINGA 14 WNW	1640	SEC 33	T19S	R13E		M	36	14	00	120	34	00	900		1949			10
C0 1870-80	COALINGA CDF	690	SEC 05	T21S	R15E	Q	M	36	08	03	120	22	00	808		1961			10
B6 1878	COARSEGOLD	2363	SEC 05	T08S	R21E		M	37	16	00	119	42	00	907		1952			20
C0 1885	COIT RANCH HDQ	278	SEC 20	T14S	R14E	D	M	36	42	20	120	28	25	000		1954			10
B3 1944	COLUMBIA	2150	SEC 11	T02N	R14E	N	M	38	02	22	120	24	37	000		1969			55
B3 2003	COPPEROPOLIS	1000	SEC 34	T02N	R12E	K	M	37	59	00	120	38	00	903		1954		03	05
C0 2012	CORCORAN IRRIG DIST	200	SEC 15	T21S	R22E	P	M	36	05	53	119	34	51	900		1912			16
C0 2013	CORCORAN EL RICO 1	185	SEC 01	T22S	R21E	E	M	36	02	36	119	38	42	002		1958			16
C0 2013-05	CORCORAN EL RICO 33	190	SEC 33	T22S	R21E	Q	M	35	57	49	119	42	14	002		1951	1969		16
B5 2072	COULTERVILLE FFS	1870	SEC 33	T02S	R16E	A	M	37	43	25	120	12	12	808		1959			22
C5 2114	CRABTREE MEADOW	10700	SEC 01	T16S	R33E		M	36	34	00	118	21	00	000		1948			54
B7 2122	CRANE VALLEY PH	3440	SEC 25	T07S	R22E	M	M	37	17	26	119	31	35	003		1903			20
C6 2222-80	CUMMINGS VALLEY 2	3825	SEC 30	T32S	R32E	G	M	35	07		118	35		806		1961	1972		15
B6 2288	DAULTON	410	SEC 26	T09S	R18E	E	M	37	07	18	119	59	00	000		1946			20
C3 2335-10	DEER CREEK RCH	950	SEC 05	T23S	R29E	R	M	35	57	15	118	51	28	000		1968	1969		54

TABLE A-1 (Cont.)

INDEX OF CLIMATOLOGICAL STATIONS

SAN JOAQUIN VALLEY

Station Number	Station Name	Elevation (in Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude °	Latitude '	Latitude "	Longitude °	Longitude '	Longitude "	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
C0 2346	DELANO	323	SEC 11	T25S	R25E	A	M	35	46	23	119	14	37	900		1876			15
C0 2346-01	DELANO GOV'T CAMP	394	SEC 28	T25S	R26E	E	M	35	48	35	119	11	00	904		1952			15
B8 2369	DEL PUERTO ROAD CAMP	1125	SEC 12	T06S	R05E	Q	M	37	25	24	121	22	42	900		1958			50
B0 2375	DELTA RANCH	90	SEC 26	T09S	R11E		M	37	07	00	120	44	00	013		1949		01	24
B0 2389	DENAIR 3 NNE	137	SEC 20	T04S	R11E		M	37	34		120	47		900		1964			50
B0 2389-20	DENAIR BARFIELD	165	SEC 20	T05S	R12E	E	M	37	29	18	120	40	47	000		1965			24
C0 2408	DEVILS DEN SLF	500	SEC 07	T25S	R19E	M	M	35	45	55	119	58	22	000		1959			15
C0 2436	DIGIORGIO	483	SEC 10	T31S	R29E	B	M	35	15	08	118	51	00	000		1937			15
C0 2440-01	DINUBA ALTA I D	334	SEC 17	T16S	R24E	D	M	36	32	32	119	23	30	000		1944			54
C7 2464	DOMENGINE RCH	1000	SEC 29	T18S	R15E	A	M	36	20	24	120	21	30	000		1959	1972		10
C7 2464-01	DOMENGINE SPRING	1700	SEC 25	T18S	R14E	K	M	36	19	53	120	24	04	000		1958	1970		10
B4 2473	DON PEDRO RESERVOIR	700	SEC 35	T02S	R14E	E	M	37	43	00	120	24	18	904		1940			55
C3 2492	DOUBLEBUNK MEADOW	6200	SEC 11	T23S	R31E		M	35	57	00	118	36	00	900		1955	1970		54
B5 2539	DUDLEYS	3000	SEC 21	T02S	R17E	D	M	37	45	14	120	06	30	900		1909			22
C1 2577	DUSY BENCH	9470		T10S	R31E		M	37	06		118	35		900		1964			10
C3 2591	EAGLE CREEK	6650		T22S	R31E		M	35	59		118	39		903		1964			54
B4 2609	EARLY INTAKE PH	2356	SEC 11	T01S	R18E	C	M	37	52	30	119	57	25	401		1925			55
C0 2752-80	EIGHTH STAND RCH	338	SEC 36	T32S	R27E		M	35	06	05	119	01	45	001		1963	1969		15
B0 2820	EL SOLYO RCH	50	SEC 06	T04S	R07E	B	M	37	37	24	121	14	09	000		1953	1972		50
B0 2860	ESCALON SWANSON	125	SEC 03	T02S	R09E	L	M	37	47	20	121	58	15	000		1944			39
B5 2920	EXCHEQUER RESERVOIR	484	SEC 13	T04S	R15E	L	M	37	35	06	120	16	11	900		1935			22
C0 2922	EXETER FAUVER RCH	439	SEC 20	T18S	R27E	D	M	36	21	28	119	04	45	900		1938			54
B0 2968	FANCHER RCH CAMP 3	225	SEC 16	T07S	R15E	N	M	37	19	04	120	20	04	000		1959			24
C7 3005	FELLOWS	1340	SEC 06	T32S	R23E	C	M	35	10	44	119	32	39	000		1956			15
B0 3063	FIREBAUGH 9 W	185	SEC 26	T12S	R12E	R	M	36	51	04	120	37	03	000		1934	1969		10
C0 3083	FIVE POINTS 5 SSW	276	SEC 17	T18S	R17E	M	M	36	21	48	120	09	22	900		1942			10
C0 3084	FIVE POINTS DIENER	263	SEC 10	T18S	R17E	R	M	36	22	20	120	06	12	000		1933			10
B7 3093	FLORENCE LAKE	7345	SEC 36	T07S	R27E	N	M	37	16	27	118	58	27	900		1940			10
C0 3207	FOUNTAIN SPRINGS R S	800	SEC 26	T23S	R28E	Q	M	35	53	31	118	55	58	808		1965			54
C0 3257	FRESNO WB AP	331	SEC 30	T13S	R21E	J	M	36	46	10	119	43	02	900		1899			10
C0 3258-80	FRESNO CO WESTSIDE FD	600	SEC 31	T20S	R16E	Q	M	36	08	27	120	16	22	806		1963			10
B7 3261	FRIANT GOVERNMENT CP	410	SEC 07	T11S	R21E	A	M	36	59	00	119	43	00	900		1896			10
B7 3261-05	FRIANT STILLWELL	1009	SEC 23	T10S	R21E	B	M	37	03	07	119	38	48	000		1965			20
C2 3397	GIANT FOREST	6412	SEC 06	T16S	R30E	E	M	36	34	05	118	46	01	900		1921			54
C0 3428-01	GIN YARD	295	SEC 12	T32S	R25E	R	M	35	09	12	119	14	10	002		1960			15
C4 3463	GLENNVILLE	3140	SEC 25	T25S	R30E	F	M	35	43	28	118	42	07	900		1951			15
C4 3465	GLENNVILLE FULTON R S	3500	SEC 29	T25S	R31E	H	M	35	44	00	118	40	00	900		1940			15
B4 3529	GRACE MEADOW	8900	SEC 31	T04N	R22E		M	38	09	00	119	36	00	900		1947	1970		55
C1 3551	GRANT GROVE	6580	SEC 32	T13S	R28E	N	M	36	44	29	118	57	40	900		1924			54
B5 3586-05	GREELEY HILL 1 N	3060	SEC 17	T02S	R17E	F	M	37	45	55	120	07	40	000		1965			22
B4 3669	GROVELAND 2	2825	SEC 21	T01S	R16E	E	M	37	50	00	120	14	00	900		1940			55
B4 3672	GROVELAND R S	3135	SEC 27	T01S	R17E	L	M	37	49	00	120	06	00	900		1940			55
B0 3690-02	GUSTINE 5 SW	145	SEC 24	T08S	R08E	F	M	37	13	26	121	02	37	000		1927			24
B0 3690-04	GUSTINE SNYDER	150	SEC 35	T08S	R08E	B	M	37	12	00	121	03	00	000		1930			24
B0 3694	GUSTINE FOREMOST	98	SEC 08	T08S	R09E	B	M	37	15	28	120	59	53	000		1928			24
B0 3698	GUSTINE 7 SSW	156	SEC 01	T09S	R08E	R	M	37	10	25	121	01	54	000		1958			24
C0 3747	HANFORD	242	SEC 26	T18S	R21E	P	M	36	19	43	119	39	55	900		1899			16
C0 3749	HANFORD REFINERY	245	SEC 36	T18S	R21E	Q	M	36	18	59	119	39	10	000		1964			16
C1 3811-11	HASLETT BASIN	2400	SEC 14	T11S	R25E	K	M	36	58	18	119	12	54	905		1960			10
B4 3939	HETCH HETCHY	3870	SEC 16	T01N	R20E	G	M	37	56	42	119	46	54	900		1910			55
B6 3948	HIDDEN VALLEY	1750	SEC 01	T06S	R18E	J	M	37	26	00	119	56	24	000		1949			22
B3 3952	HIGHLAND LAKES	8700	SEC 32	T08N	R20E	Q	M	38	29	48	119	47	48	900		1960			02
B0 3981	HILMAR	93	SEC 22	T06S	R10E	A	M	37	24	10	120	50	59	000		1948			24
C2 4012	HOCKETT MEADOWS	8500	SEC 07	T18S	R31E		M	36	22	00	118	39	00	900		1959			54
B4 4015	HODGDON MEADOW	4640	SEC 03	T02S	R19E		M	37	48		119	52		907		1967			55
C0 4061-01	HOMELAND DIST SEC 9	190	SEC 09	T23S	R22E	A	M	35	56	53	119	35	30	002		1952	1969		16
B5 4102-01	HORNITOS ERICKSON RCH	1150	SEC 18	T05S	R17E	Q	M	37	29	40	120	08	55	000		1955			22
B5 4103	HORNITOS GILES RCH	1050	SEC 29	T05S	R16E	H	M	37	28	10	120	14	00	000		1939			22
B5 4104-80	HORNITOS USCE	850	SEC 17	T05S	R16E	G	M	37	30	10	120	14	08	901		1960			22
C3 4120	HOSSACK (RADIO)	7100	SEC 16	T20S	R31E		M	36	11	00	118	37	00	900		1959			54
B4 4148	HUCKLEBERRY LAKE	7800	SEC 23	T03N	R20E		M	38	06	00	119	45	00	900		1948	1971		55
B3 4170	HUNTERS DAM	3220	SEC 18	T04N	R15E	K	M	38	12	00	120	21	36	900		1950			05
B7 4176	HUNTINGTON LAKE	7020	SEC 15	T08S	R25E	R	M	37	13	45	119	13	10	900		1915			10
C0 4188	HURON RANCH	335	SEC 22	T19S	R17E		M	36	15	41	120	06	05	000		1951			10
B8 4204	IDRIA	2650	SEC 29	T17S	R12E	J	M	36	24	58	120	40	17	900		1918			35
B5 4246	INDIAN GULCH	1000	SEC 03	T06S	R16E	J	M	37	26	18	120	11	46	000		1952	1970		22
C5 4303	ISABELLA DAM	2660	SEC 19	T26S	R33E	P	M	35	38	46	118	28	45	903		1949			15
C0 4312	IVANHOE I D	370	SEC 36	T18S	R25E	R	M	36	24	15	119	12	21	000		1954			54
B5 4369	JERSEYDALE G S	3605	SEC 35	T04S	R19E		M	37	32	36	119	50		905		1958			22
C5 4389	JOHNSONDALE	4680	SEC 32	T22S	R32E	K	M	35	58	13	118	32	27	900		1954			54

TABLE A-I (Cont.)

INDEX OF CLIMATOLOGICAL STATIONS

SAN JOAQUIN VALLEY

Station Number	Station Name	Elevation (In Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude ° ' "	Longitude ° ' "	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
B7 4442	KAISER MEADOWS	9110	SEC 26	T07S	R26E		M	37 18 00	119 06 00	900		1946			10
C2 4452	KAWEAH PH 3	1370	SEC 33	T16S	R29E	Q	M	36 29 12	118 50 06	004		1913			54
C6 4463	KEENE	2575	SEC 20	T31S	R32E	C	M	35 13 28	118 33 55	000		1948			15
C5 4513	KERN CANYON	700	SEC 06	T29S	R30E	B	M	35 26 27	118 47 45	003		1916			15
C5 4519	KERN R 3 INTAKE SCE	3642	SEC 12	T23S	R32E	F	M	35 56 43	118 28 33	004		1921			54
C5 4520	KERN RIVER PH NO 1	970	SEC 29	T28S	R30E	N	M	35 27 37	118 46 48	900		1904			15
C5 4523	KERN RIVER PH NO 3	2703	SEC 09	T25S	R33E	A	M	35 46 35	118 26 08	900		1946			15
C0 4534	KETTLEMAN CITY	310	SEC 19	T22S	R19E	C	M	35 59 45	119 57 55	900		1930		03	16
C0 4535	KETTLEMAN HILLS	1255	SEC 11	T22S	R17E	F	M	36 01 50	120 06 15	000		1931			16
C0 4536	KETTLEMAN STATION	508	SEC 25	T21S	R17E	L	M	36 04 28	120 05 08	900		1933			16
B0 4590	KNIGHTS FERRY 2 SE	315	SEC 27	T01S	R12E		M	37 47 54	120 38 42	900		1905			50
B3 4664	LAKE ALPINE	7500	SEC 08	T07N	R18E	A	M	38 28 42	120 00 48	900		1948			02
B4 4679	LAKE ELEANOR	4662	SEC 03	T01N	R19E	F	M	37 58 00	119 53 00	900		1909	1972		55
C6 4863	LEBEC	3585	SEC 26	T09N	R19W	P	S	34 49 58	118 51 51	900		1940			15
B0 4884	LE GRAND	255	SEC 17	T08S	R16E	N	M	37 13 50	120 14 50	900		1899			24
B0 4884-05	LE GRAND 6 N	280	SEC 19	T07S	R16E	H	M	37 18 39	120 15 05	000		1946			24
C2 4890	LEMON COVE	513	SEC 02	T18S	R27E	N	M	36 23 00	119 01 31	900		1899			54
C0 4957	LINDSAY	395	SEC 17	T20S	R27E	F	M	36 11 24	119 04 20	900		1913			54
B8 4979	LITTLE PANOCHE DET RES	677	SEC 20	T13S	R11E		M	36 47	120 48	900		1968			10
B0 4999-02	LIVINGSTON CITY HALL	130	SEC 25	T06S	R11E	E	M	37 23 10	120 43 15	000		1948		07	24
B0 4999-03	LIVINGSTON 5 W	112	SEC 32	T06S	R11E	D	M	37 22 29	120 47 40	000		1952			24
C2 5026	LODGEPOLE	6735	SEC 21	T15S	R30E		M	36 36	118 14	900		1968			54
C6 5098	LORAINE	2720	SEC 21	T30S	R33E	K	M	35 18 05	118 25 54	900		1941			15
B0 5116	LOS BANOS 5 S	175	SEC 11	T11S	R10E	P	M	36 59 02	120 50 45	013		1948			24
B0 5117	LOS BANOS FIELD STA	160	SEC 32	T10S	R10E	Q	M	37 00 54	120 53 55	904		1956			24
B0 5118	LOS BANOS	125	SEC 23	T10S	R10E	L	M	37 03 00	120 51 00	900		1873			24
B8 5119	LOS BANOS ARBURUA	860	SEC 24	T12S	R09E	C	M	36 52 52	120 56 25	900		1932			24
B8 5120	LOS BANOS DET RES	407	SEC 12	T11S	R09E		M	37 01	120 56	900		1968			24
C0 5151	LOST HILLS	285	SEC 35	T26S	R21E	N	M	35 37 00	119 41 17	900		1912			15
C1 5155-51	LOWER BIG CREEK	1078	SEC 04	T12S	R25E	J	M	36 54 48	119 14 42	905		1960	1967		10
B4 5160	LOWER KIBBEY RIDGE	6500	SEC 22	T02N	R19E		M	38 01 00	119 53 00	900		1948	1971		55
B0 5233-03	MADERA I D YARD	270	SEC 32	T11S	R18E	N	M	36 55 15	120 01 12	904		1952			20
B0 5236	MADERA	200	SEC 13	T11S	R18E	P	M	36 58	120 03	900		1950			20
C0 5257	MAGUNDEN	440	SEC 36	T29S	R28E	G	M	35 21 42	118 55 18	004		1927			15
B7 5288	MAMMOTH POOL	3400	SEC 11	T07S	R24E	D	M	37 20 31	119 19 45	905		1947			20
B0 5303	MANTECA	44	SEC 04	T02S	R07E	H	M	37 47	121 12	900		1964			39
C7 5338	MARICOPA	680	SEC 31	T12N	R23W	N	S	35 04 48	119 22 58	900		1911			15
C7 5338-01	MARICOPA F S	885	SEC 12	T11N	R24W	E	S	35 04	119 24	000		1959			15
B5 5346	MARIPOSA	2011	SEC 23	T05S	R18E	B	M	37 29 10	119 58 00	900		1909			22
B5 5346-01	MARIPOSA REYNOLDS	2000	SEC 23	T05S	R18E	B	M	37 29 20	119 57 55	000		1958			22
B6 5346-04	MARIPOSA 8 ESE	2780	SEC 06	T06S	R20E	E	M	37 26 30	119 49 37	000		1952			22
B5 5352	MARIPOSA RS	2100	SEC 15	T05S	R18E	F	M	37 30 04	119 59 05	808		1943			22
C7 5372-01	MARTINEZ SPRING	1875	SEC 26	T18S	R14E	B	M	36 20 24	120 24 54	000		1959	1970		10
B4 5400	MATHER	4518	SEC 02	T01S	R19E	G	M	37 53 25	119 51 10	900		1930		21	55
B5 5460	MCDIERMID STA	2990	SEC 33	T02S	R17E	H	M	37 43 18	120 05 48	000		1959	1969		22
C7 5480-01	MCKITTRICK F S	1051	SEC 21	T30S	R22E	E	M	35 18 20	119 37 20	000		1956			15
B7 5496	MEADOW LAKE	4485	SEC 11	T10S	R23E	F	M	37 04 38	119 26 00	900		1948			10
B3 5511	MELONES DAM	900	SEC 11	T01N	R13E	K	M	37 57 10	120 30 53	404		1955	1969		55
B0 5526	MENDOTA 1 NNW	172	SEC 25	T13S	R14E	H	M	36 46 23	120 23 09	013		1941			10
C0 5526-04	MENDOTA MURIETTA RCH	261	SEC 04	T15S	R14E	M	M	36 39 05	120 27 20	806		1958			10
B0 5528	MENDOTA DAM	166	SEC 19	T13S	R15E	G	M	36 47 15	120 22 12	900		1873			10
B0 5530	MENDOTA V D L FARMS	230	SEC 32	T13S	R14E	Q	M	36 44 58	120 28 00	000		1948			10
B0 5532	MERCED FIRE STN NO 2	169	SEC 25	T07S	R13E		M	37 17 43	120 29 13	900		1872			24
B0 5534	MERCED FANCHER RCH	212	SEC 29	T07S	R15E	F	M	37 17 47	120 21 09	000		1920			24
B0 5535	MERCED 2	168	SEC 19	T07S	R14E	A	M	37 18 53	120 28 12	900		1938			24
C3 5669	MILO 5 NE	3400	SEC 18	T19S	R30E	C	M	36 16 40	118 46 15	900		1957			54
C6 5669-05	MIL POTRERO	5800	SEC 24	T09N	R22W	E	S	34 51 02	119 11 18	000		1966			15
C2 5680	MINERAL KING	7975	SEC 22	T17S	R31E		M	36 26 00	118 35 00	900		1956	1969		54
C2 5708	MIRAMONTE HONOR CAMP	3005	SEC 31	T14S	R27E	D	M	36 40 00	119 05 00	900		1958			10
C1 5723	MITCHELL MEADOW	9700	SEC 33	T13S	R30E		M	36 45 00	118 43 00	900		1957	1969		10
B4 5735	MOCCASIN	950	SEC 34	T01S	R15E	B	M	37 48 40	120 18 20	401		1935			55
B0 5738	MODESTO	91	SEC 29	T03S	R09E	H	M	37 38 48	121 00 02	900		1926			50
B0 5740	MODESTO KTRB	93	SEC 16	T03S	R09E	J	M	37 40 12	120 58 42	010		1959			50
B0 5741	MODESTO 2	92	SEC 29	T03S	R09E	M	M	37 38 36	121 00 29	900		1942			50
C5 5777	MONACHE MEADOWS	8000	SEC 10	T20S	R35E		M	36 13 00	118 10 00	900		1940	1971		54
C0 5822-80	MOODY RCH	405	SEC 34	T32S	R28E		M	35 06 15	118 58 00	001		1963	1969		15
C1 5832	MORAINE CREEK	8840		T14S	R31E		M	36 43	118 34	903		1964			54
C3 5887	MOUNTAIN HOME 2	5360	SEC 27	T19S	R30E	J	M	36 14 30	118 42 54	901		1963			54
B7 5927	MT GIVENS	9500	SEC 26	T07S	R26E	E	M	37 17	119 06	004		1963	1969		10
B0 6168	NEWMAN 2 NW	108	SEC 12	T07S	R08E	E	M	37 20 33	122 50 00	900		1889			50

TABLE A-I (Cont.)

INDEX OF CLIMATOLOGICAL STATIONS

SAN JOAQUIN VALLEY

Station Number	Station Name	Elevation (In Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude ° ' "	Longitude ° ' "	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
C0 6230-50	NORTH BELRIDGE	630	SEC 26	T27S	R20E	F	M M	35 33 04	119 47 28	000		1953			15
B7 6252	NORTH FORK R S	2630	SEC 18	T08S	R23E	M	M M	37 13 57	119 30 15	900		1904			20
B0 6303	OAKDALE	155	SEC 11	T02S	R10E	N	M M	37 46 10	120 50 53	000		1880		01	50
B6 6321-80	OAKHURST	2250	SEC 14	T07S	R21E	L	M M	37 19 46	119 38 42	000		1961			20
C0 6393	OILFIELDS F S	950	SEC 26	T19S	R15E	F	M M	36 14 50	120 18 50	808		1952			10
C7 6395	OILFIELDS JOAQUIN RDG	3620	SEC 01	T19S	R14E		M M	36 18 00	120 24 00	900		1949			10
C0 6414	OLD RIVER 3 W	334	SEC 35	T30S	R26E	C	M M	35 16	119 16	806		1965			15
C5 6462	ONYX	2700	SEC 04	T26S	R35E	K	M M	35 41 00	118 14 00	903		1938			15
C0 6476	ORANGE COVE	431	SEC 13	T15S	R24E	K	M M	36 37 18	119 18 40	900		1931			10
B0 6490	ORESTIMBA	110	SEC 02	T07S	R08E	D	M M	37 21 42	121 03 47	013		1896			50
B5 6552	OSTRANDER LAKE	8600	SEC	T03S	R22E		M M	37 38 00	119 33 00	900		1947			22
B8 6583	PACHECO PASS	850	SEC 10	T10S	R07E	B	M M	37 04 00	121 11 00	900		1949			24
B8 6675	PANOCHE	1265	SEC 25	T15S	R10E	F	M M	36 35 47	120 49 58	900		1922			35
B8 6676	PANOCHE 2 W	1320	SEC 21	T15S	R10E		M M	36 36 30	120 52 48	407		1957			35
B0 6679-05	PANOCHE WATER DIST	183	SEC 14	T12S	R11E	H	M M	36 53 24	120 43 43	000		1949			10
B4 6688	PARADISE MEADOW	7700	SEC 09	T02N	R21E		M M	38 03 00	119 40 00	900		1948	1971		55
B0 6746-01	PATTERSON	100	SEC 30	T05S	R08E		M M	37 28 00	121 07 00	000		1912			50
B6 6754	PATTIWAY	3868	SEC 19	T10N	R23W	E	S M	34 56 27	119 22 52	900		1915			15
C2 6767	PEAR LAKE	9700	SEC 24	T15S	R30E		M M	36 36 00	118 40 00	900		1956	1969		54
B8 6847	PFEIFFER RCH	1615	SEC 19	T12S	R08E	C	M M	36 52 59	121 08 12	000		1954	1971		24
B3 6893	PINECREST SUMMIT R S	5600	SEC 21	T04N	R18E		M M	38 12	119 59	905		1964			55
B3 6893-01	PINECREST STRAWBERRY	5620	SEC 22	T04N	R18E	F	M M	38 11 25	119 59 12	003		1922			55
C1 6896	PINE FLAT DAM	615	SEC 02	T13S	R24E	A	M M	36 49 55	119 19 25	903		1949			10
C1 6902	PINEHURST	4050	SEC 23	T14S	R27E	D	M M	36 41 54	119 00 54	905		1954			10
C0 7077	PORTERVILLE	393	SEC 26	T21S	R27E	R	M M	36 03 58	119 01 14	900		1893			54
C0 7079	PORTERVILLE 3 W	413	SEC 20	T21S	R27E	R	M M	36 04 50	119 04 14	000		1958			54
C5 7093	PORTUGUESE MEADOW	7000	SEC 31	T24S	R32E		M M	35 48 00	118 34 00	900		1953			54
C4 7096	POSEY 3 E	4920	SEC 28	T24S	R31E		M M	35 48 00	118 38 00	900		1954		02	54
C0 7098-07	POSO CREEK	670	SEC 28	T27S	R27E	F	M M	35 33 15	119 04 25	000		1967	1969		15
C0 7098-11	POSO RCH	370	SEC 03	T27S	R25E	J	M M	35 36 30	119 15 45	001		1913	1969		15
B0 7099-11	POSO CANAL CO HDQ	125	SEC 12	T11S	R13E	P	M M	36 58 57	120 30 04	013		1955			10
C5 7179	QUAKING ASPEN	7200	SEC 08	T21S	R32E		M M	36 07 00	118 32 00	900		1955	1970		54
C1 7259	RATTLESNAKE CREEK	9900	SEC 08	T11S	R30E		M M	36 59 00	118 43 00	900		1961			10
B6 7270-01	RAYMOND 3 SSW	635	SEC 06	T09S	R19E	J	M M	37 10 32	119 55 55	000		1940	1970		20
B6 7272-01	RAYMOND 10 N	1640	SEC 32	T06S	R19E	A	M M	37 22 24	119 54 24	000		1957			22
B6 7276	RAYMOND 12 NNE	1600	SEC 25	T06S	R19E	R	M M	37 22 37	119 49 58	000		1954			22
C0 7288	RECTOR	344	SEC 03	T19S	R25E	J	M M	36 18 15	119 14 34	004		1888			54
C0 7354-80	REEDLEY MVFD	345	SEC 27	T15S	R23E		M M	36 37	119 27	808		1962			10
B0 7447-80	RIPON	65	SEC 20	T02S	R08E		M M	37 44 33	121 07 21	000		1963			39
C0 7460	RIVERDALE	220	SEC 24	T17S	R19E	P	M M	36 25 58	119 51 36	000		1917			10
B6 7528	ROCKY VILLAGE	820	SEC 19	T06S	R17E	K	M M	37 20 45	120 08 42	000		1957	1972		22
C3 7529	ROGERS CAMP	6240	SEC 09	T21S	R31E		M M	36 04 24	118 38 12	901		1964			54
C0 7555	ROSEDALE	380	SEC 01	T29S	R26E	R	M M	35 25 40	119 07 42	001		1914	1969		15
B7 7560	ROSE MARIE MEADOW	10000	SEC 14	T07S	R28E		M M	37 19 00	118 52 00	900		1953			10
C5 7579	ROUND MEADOW	9000	SEC 36	T22S	R33E		M M	35 58 00	118 21 00	900		1947	1971		54
B4 7623	SACHES SPRINGS	7900	SEC 25	T03N	R19E		M M	38 06 00	119 51 00	900		1948	1971		55
C0 7753	SAN EMIGDIO RCH	1450	SEC 36	T11N	R22W	L	S M	34 59 45	119 10 59	900		1901	1969		15
C0 7800-02	SANGER 1 NE	375	SEC 11	T14S	R22E	K	M M	36 43 30	119 32 36	000		1959			10
C0 7800-03	SANGER R S	375	SEC 11	T14S	R22E	E	M M	36 43 48	119 33 18	808		1958			10
C0 7816	SAN JOAQUIN	174	SEC 23	T15S	R16E	J	M M	36 36 25	120 11 15	000		1919			10
B7 7817	SAN JOAQUIN EXP RANGE	1100	SEC 06	T10S	R21E	E	M M	37 05 40	119 43 38	900		1934			20
C0 7819-80	SAN JOAQUIN MVFD	174	SEC 23	T15S	R16E	J	M M	36 36 28	120 11 18	808		1962	1970		10
B8 7846	SAN LUIS DAM	277	SEC 14	T10S	R08E		M M	37 03	121 04	904		1959			24
B0 7855	SAN LUIS CANAL CO HQ	99	SEC 31	T09S	R12E	P	M M	37 06 07	120 42 04	013		1944			24
C0 7987-80	SANTIAGA RANCH	437	SEC 27	T12N	R22W		S M	35 05 35	119 12 35	000		1963	1970		15
B0 8316	SNELLING	259	SEC 04	T05S	R14E		M M	37 31 24	120 26 18	000		1882		19	24
B0 8316-05	SNELLING 3 WNW	300	SEC 36	T04S	R13E	J	M M	37 32 35	120 28 57	000		1949			24
B5 8318	SNOW FLAT	8700	SEC 19	T01S	R23E		M M	37 50 00	119 30 00	900		1947	1972		22
C1 8323-01	SOAPROOT SADDLE	3830	SEC 28	T10S	R25E	P	M M	37 01 30	119 15 06	905		1960	1967		10
B4 8353	SONORA R S	1745	SEC 36	T02N	R14E		M M	37 59 00	120 23 00	900		1887			55
C0 8375-50	SOUTH BELRIDGE	575	SEC 28	T28S	R21E	R	M M	35 27 23	119 42 37	000		1938			15
B0 8378	SOUTH DOS PALOS	116	SEC 22	T11S	R12E	E	M M	37 58 45	120 38 48	000		1938			24
B5 8380	SO ENTRANCE YOSEMITE	5120	SEC 12	T05S	R21E	N	M M	37 30 26	119 37 55	900		1941			22
C0 8407-11	SOUTH LAKE FARMS HDQ	190	SEC 13	T23S	R21E	A	M M	35 56 02	119 38 46	000		1959			16
B3 8450	SPRING GAP FOREBAY	3000	SEC 27	T04N	R17E	H	M M	38 10 06	120 06 08	003		1921			55
C3 8455	SPRINGVILLE 7 ENE	2470	SEC 26	T20S	R30E	D	M M	36 09 47	118 42 21	900		1953			54
C3 8460	SPRINGVILLE R S	1050	SEC 02	T21S	R29E	B	M M	36 08 09	118 48 40	900		1924			54
C3 8463	SPRINGVILLE TULE HDW	4070	SEC 07	T20S	R31E	Q	M M	36 11 35	118 39 23	900		1907			54
C1 8474-80	SQUAW VALLEY FR	1750	SEC 35	T13S	R25E	P	M M	36 44 58	119 12 21	808		1961			10
B3 8499	STANISLAUS PH	1130	SEC 06	T03N	R15E	L	M M	38 08 23	120 22 10	900		1957			55

TABLE A-1 (Cont.)

INDEX OF CLIMATOLOGICAL STATIONS

SAN JOAQUIN VALLEY

Station Number	Station Name	Elevation (In Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude ° ' "	Longitude ° ' "	Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
C1 8510	STATE LAKES	10300	SEC 34	T11S	R31E		M	36 56 00	118 35 00	900		1955			10
C3 8620	SUCCESS DAM	590	SEC 35	T21S	R28E	L	M	36 03 00	118 55 00	903		1959			54
C1 8643	SUMMIT MEADOW	6240	SEC 02	T10S	R25E	Q	M	37 05 12	119 12 36	900		1960			10
C7 8752	TAFT	1025	SEC 14	T32S	R23E	J	M	35 08 34	119 27 53	900		1940			15
C7 8755	TAFT KTKR RADIO	1030	SEC 14	T32S	R23E	G	M	35 08 50	119 28 18	000		1954			15
C6 8826	TEHACHAPI	3975	SEC 21	T32S	R33E	M	M	35 08 00	118 27 00	900		1876			15
C6 8832	TEHACHAPI AIRPORT	3975	SEC 21	T32S	R33E	C	M	35 08 05	118 26 31	900		1940			15
C0 8839	TEJON RANCHO	1425	SEC 24	T11N	R18W	H	S	35 01 35	118 44 38	900		1895			15
C5 8857-10	TEN HIGH MINE	5200	SEC 03	T27S	R31E	A	M	35 36 49	118 37 30	000		1968	1971		15
C2 8868	TERMINUS DAM	965	SEC 36	T17S	R27E	E	M	36 24 37	119 00 20	903		1959			54
C7 8893-80	THIRTY-TWO CORRAL	1700	SEC 32	T18S	R15E	P	M	36 18 47	120 21 51	000		1959	1970		10
C2 8912	THREE RIVERS 6 SE	2200	SEC 16	T18S	R29E	C	M	36 22 00	118 51 00	900		1940			54
C2 8914	THREE RIVERS PH NO 2	950	SEC 07	T17S	R29E	Q	M	36 27 40	118 52 40	900		1909	1971		54
C2 8917	THREE RIVERS PH NO 1	1140	SEC 08	T17S	R29E	K	M	36 27 58	118 51 40	900		1940			54
C0 9006	TRANQUILLITY GLOTZ	165	SEC 16	T15S	R16E	C	M	36 37 57	120 14 13	000		1953			10
B6 9020-15	TRIANGLE-DESMOND	3150	SEC 19	T05S	R20E	A	M	37 29 10	119 49 06	000		1965			22
C1 9025	TRIMMER R S	736	SEC 12	T12S	R24E	A	M	36 54 05	119 17 16	905		1948			10
C0 9051	TULARE	293	SEC 01	T20S	R24E	N	M	36 12 45	119 19 50	004		1919			54
C0 9051-04	TULARE DIST SEC 27	179	SEC 27	T21S	R20E	A	M	36 04 41	119 47 33	002		1953	1969		16
C0 9052	TULEFIELD	300	SEC 18	T32S	R28E	B	M	35 09 00	119 01 00	900		1948	1970		15
C3 9059	TULE RIVER INTAKE	2450	SEC 26	T20S	R30E	D	M	36 09 42	118 42 22	004		1910			54
C3 9060	TULE RIVER PH	1240	SEC 06	T21S	R30E	D	M	36 08 07	118 47 15	004		1910			54
C5 9061	TUNNEL R S	8950	SEC 10	T18S	R34E		M	36 22 00	118 17 00	900		1945			54
B3 9062	TULLOCH DAM	515	SEC 01	T01S	R12E	L	M	37 52 30	120 36 12	404		1958			05
B4 9062-90	TUOLUMNE MAINT YARD	2690	SEC 05	T01N	R16E	R	M	37 57 55	120 13 55	000		1969			55
B4 9063	TUOLUMNE MEADOWS	8600	SEC 03	T01S	R24E		M	37 53 00	119 20 00	900		1947			55
B0 9073	TURLOCK	115	SEC 22	T05S	R10E	D	M	37 29 28	120 51 00	900		1893			50
B0 9073-01	TURLOCK 5 SW	76	SEC 30	T05S	R10E	Q	M	37 27 52	120 54 39	000		1958			50
B0 9073-02	TURLOCK 8 WSW	60	SEC 28	T05S	R09E	D	M	37 28 22	120 59 30	000		1958			50
C3 9120	UHL R S	3680	SEC 32	T23S	R31E	H	M	35 53	118 39	900		1965			54
C0 9145	U S COTTON FIELD STN	367	SEC 33	T27S	R25E	J	M	35 32 00	119 16 40	906		1922			15
B7 9301	VERMILLION VALLEY	7520	SEC 26	T06S	R27E		M	37 22 00	118 59 00	900		1946			10
C0 9304	VESTAL	500	SEC 17	T24S	R27E	M	M	35 50 24	119 05 12	004		1920			54
C1 9328	VIDETTE MEADOW	9500		T13S	R33E		M	36 45	118 25	901		1964			10
C0 9367	VISALIA	354	SEC 29	T18S	R25E	M	M	36 19 45	119 17 18	900		1903			54
C0 9369	VISALIA 4 E	357	SEC 36	T18S	R25E	D	M	36 19 32	119 13 24	000		1959	1970		54
C5 9417-10	WALKER BASIN	3450	SEC 10	T29S	R32E	E	M	35 25 17	118 32 35	000		1968			15
C0 9452	WASCO	333	SEC 12	T27S	R24E	J	M	35 35 35	119 19 57	900		1899			15
B5 9482	WAWONA R S	3975	SEC 34	T04S	R21E	P	M	37 32	119 40	900		1941			22
C5 9512	WELDON 1 WSW	2680	SEC 23	T26S	R34E	D	M	35 40 00	118 18 00	900		1940			15
B6 9556-80	WESTFALL R S	4795	SEC 35	T05S	R21E	M	M	37 26 58	119 38 59	905		1961	1971		20
C0 9560	WESTHAVEN	285	SEC 34	T19S	R18E	R	M	36 13 38	119 59 40	900		1925			10
B0 9565	WESTLEY	85	SEC 33	T04S	R07E	B	M	37 33 00	121 12 00	000		1928			50
C1 9600	WEST WOODCHUCK	9100	SEC 28	T10S	R28E		M	37 01 48	118 55 06	903		1969			10
C5 9602	WET MEADOW	8950	SEC 13	T18S	R32E	R	M	36 20 56	118 34 16	900		1959			54
C2 9629	WHITAKER FOREST	5360	SEC 16	T14S	R28E	Q	M	36 42 05	118 55 56	815		1966			54
B6 9640-80	WHITE ROCK PRESTON	984	SEC 07	T07S	R18E	K	M	37 20 12	120 02 18	903		1950			22
C0 9670-80	WILBUR DITCH	210	SEC 18	T23S	R21E	D	M	35 36 10	119 45 10	000		1962			16
C1 9749	WISHON LAKE	6560	SEC 01	T11S	R27E		M	37 00 40	118 58 20	003		1957			10
C5 9754	WOFFORD HEIGHTS	2700	SEC 32	T25S	R33E	H	M	35 43 00	118 27 00	900		1894			15
C4 9805	WOODY	1630	SEC 03	T26S	R29E	C	M	35 42 02	118 50 34	808		1956			15
B5 9855	YOSEMITE NAT PARK	3985	SEC 20	T02S	R22E		M	37 45 00	119 35 00	900		1904			22
ADDITIONAL STATIONS, 1971-72															
B0 5738-35	MODESTO 6 SW	50	SEC 03	T05S	R08E	C	M	37 32 05	121 04 30			1970			50
B7 5893	MOUNTAIN REST	4100	SEC 17	T10S	R24E	R	M	37 03 18	119 22 12	905		1960			10
C0 4564-20	KINGSBURG 2 S	286	SEC 02	T17S	R22E		M	36 30	119 33	915		1970			16
C6 2683-20	EDMONSTON P P	1300	SEC 17	T10N	R18W	M	S	34 56 42	118 49 30	806		1971	1973		15
C5 6724-50	PASCOES	9130	SEC 36	T22S	R33E		M	35 58	118 21	903		1971			54

TABLE A-2

PRECIPITATION DATA

The definition of terms and abbreviations used in this table follows:

E	Wholly or partially estimated.
T	Trace, an amount too small to measure.
NR	Data not received before publication.
RB	Record begins.
RE	Record ends.
INC	Incomplete data.

Precipitation values are shown to the nearest hundredth (.01) of an inch, except where Fisher & Porter recording rain gages are used; these values are shown to the nearest tenth (.1) of an inch.

TABLE A-2 (Cont.)

PRECIPITATION DATA

RECIPITATION IN INCHES

STATION NAME	TOTAL JULY 1 TO JUNE 30	1972						1973									TOTAL OCT 1 TO SEPT 30
		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	
SAN JOAQUIN R BASIN																	
SAN JOAQUIN VAL FL 80																	
CASTLE AFB	18.75	0.00	0.00	0.05	0.65	4.21	1.61	3.71	4.99	3.49	0.04	T	T	0.00	0.00	0.00	18.70
DELTA RCH	14.83	0.00	0.00	0.00	0.43	4.37	0.67	2.84	4.14	2.38	0.00	0.00	0.00	0.00	0.00	T	14.83
DENAIR BARFIELD	18.25	0.00	0.00	0.00	0.42	3.40	1.53	3.04	6.37	3.40	0.09	0.00	0.00	0.00	0.00	0.00	18.25
EL SOLYO RCH	INC	0.00	0.00	0.00	RE												
FANCHER RCH CAMP =3	17.19E	0.00E	0.00E	0.17	0.82	5.00	0.76	3.51	4.30	2.59	0.04	0.00	0.00	0.00	0.00	0.00	17.02
GUSTINE 5 SW	15.98	0.00	0.00	T	1.18	4.84	0.96	3.21	3.99	1.61	0.19	0.00	0.00	0.00	0.00	0.00	15.98
GUSTINE SNYDER	16.75	0.00	0.00	T	1.13	5.04	0.80	3.64	4.11	1.77	0.26	0.00	0.00	0.00	0.00	0.00	16.75
GUSTINE FOREMOST	18.33	0.00	0.00	0.00	1.67	4.58	1.06	3.82	4.99	2.21	0.00	0.00	0.00	0.00	0.00	0.00	18.33
GUSTINE 7 SSW	17.83	0.00	0.00	T	1.40	5.31	0.87	3.77	4.57	1.84	0.07	0.00	0.00	0.00	0.00	0.00	17.83
HILMAR	16.80	0.00	0.00	0.00	0.54	4.16	0.79	3.14	5.83	2.31	0.00	0.00	0.03	0.00	0.00	T	16.80
LE GRAND 6 N (USCE)	18.27	0.00	0.00	0.15	0.52	4.63	1.99	3.17	4.26	3.50	0.05	0.00	0.00	0.00	0.00	0.00	18.12
LIVINGSTON CITY HALL	18.66	0.00	0.00	0.00	0.46	4.18	1.13	3.76	6.12	2.94	0.07	0.00	T	0.00	0.00	0.01	18.67
LIVINGSTON 5 W	17.69	0.00	0.00	0.00	0.47	3.70	1.04	3.30	6.15	2.87	0.16	0.00	0.00	0.00	0.00	0.00	17.69
LOS BANOS 5 S	13.36	0.00	0.00	0.12	0.51	4.92	1.05	2.10	3.30	1.36	0.00	0.00	0.00	0.00	0.00	0.00	13.24
LOS BANOS FIELD STA	13.65	T	0.00	0.06	0.53	4.75	0.98	2.55	3.54	1.17	0.07	0.00	0.00	0.00	0.00	T	13.59
MADERA I D	15.58	0.01	0.00	0.08	0.53	3.81	1.62	2.13	3.97	3.10	0.30	0.01	0.02	0.00	0.00	0.00	15.49
MENDOTA 1 NNW	11.96	T	0.00	0.13	0.29	4.09	1.05	1.72	3.13	1.42	0.13	0.00	0.00	0.00	0.00	0.00	11.83
MENDOTA VDL FARMS	12.15	0.00	0.00	0.15	0.47	3.57	0.92	1.99	3.42	1.41	0.22	T	0.00	0.00	0.00	0.00	12.00
MERCED FANCHER RCH	18.42	0.00	0.00	0.00	0.84	4.59	2.06	3.16	4.34	3.43	0.00	0.00	0.00	0.00	0.00	0.00	18.42
MODESTO 6 SW	20.31	0.00	0.00	0.14	0.94	5.65	1.38	3.91	5.43	2.69	0.17	0.00	0.00	0.00	0.00	0.00	20.17
MODESTO KTRB	14.54	0.00	0.00	0.12	0.06	3.93	1.00	2.81	3.12	3.25	0.20	T	0.05	0.00	0.00	T	14.42
OAKDALE	18.59	0.00	0.00	0.04	0.45	3.90	1.93	4.20	4.10	3.83	0.14	T	T	0.00	0.00	T	18.55
ORESTIMBA	16.29	0.00	0.00	0.03	1.16	4.01	1.00	2.97	4.03	3.03	0.06	0.00	0.00	0.00	0.00	0.00	16.26
PANOCHE WATER DIST	12.20	0.00	0.00	0.05	0.67	3.57	1.15	2.42	3.09	1.25	0.00	0.00	0.00	0.00	0.00	0.00	12.15
PATTERSON	16.95	0.00	0.00	0.09	0.72	4.20	0.86	3.39	4.91	2.61	0.17	0.00	0.00	0.00	0.00	0.00	16.86
POSO CANAL CO HQ	13.89	0.00	0.00	0.31	0.73	3.93	1.29	1.90	3.72	2.01	T	0.00	0.00	0.00	0.00	0.00	13.58
RIPON	18.15	0.00	0.00	0.37	0.57	4.13	1.52	4.72	3.64	3.08	0.07	T	0.05	0.00	0.00	T	17.78
SAN LUIS CANAL CO HQ	14.81	0.00	0.00	0.11	0.56	4.54	1.16	2.85	3.66	1.93	T	0.00	0.00	0.00	0.00	T	14.70
SNELLING	20.57	0.00	0.00	0.03	0.25	4.18	2.38	3.38	6.20	4.00	0.15	0.00	0.00	0.00	0.00	0.00	20.54
SNELLING 3 WNW	18.00	0.00	0.00	0.00	0.49	3.67	2.35	3.39	4.04	3.97	0.09	0.00	0.00	0.00	0.00	0.00	18.00
SOUTH DOS PALOS	13.90	0.00	0.00	0.30	0.61	4.29	1.13	2.31	3.08	2.16	0.02	0.00	0.00	0.00	0.00	0.00	13.60
TURLOCK 5 SW	18.70	0.00	0.00	T	0.70	3.60	2.10	3.15	5.80	3.35	T	T	T	0.00	0.00	0.00	18.70
TURLOCK 8 WSW	INC	0.00	0.00	T	NR	NR	NR	2.96	4.15	2.43	0.11	0.00	0.00	0.00	0.00	0.00	INC
WESTLEY	16.37	0.00	0.00	0.19	0.95	4.69	0.88	3.17	4.33	2.16	0.00	0.00	0.00	0.00	0.00	0.00	16.18
MERCED RIVER B5																	
BEAR VALLEY (USCE)	31.96	0.00	0.00	0.26	0.63	5.66	3.75	6.02	8.22	7.11	0.31	0.00	0.00	0.00	0.00	0.00	31.70
CATHEYS VALLEY 3 NNW	28.10	0.00	0.00	0.00	0.60	7.35	1.65	4.50	6.80	6.85	0.35	0.00	0.00	0.00	0.00	0.00	28.10
COULTERVILLE FFS	32.88	0.00	0.00	0.05	0.54	5.79	4.67	6.21	8.38	5.77	1.02	0.00	0.45	0.00	0.04	0.05	32.92
GREELEY HILL 1 N	44.34	0.00	0.12	0.03	0.60	7.37	5.98	8.74	13.51	7.42	0.45	0.08	0.04	0.00	0.00	0.08	44.27
HORNITOS ERICKSON RCH	27.20	0.00	0.00	0.22	0.79	6.34	2.96	4.60	6.70	5.37	0.22	0.00	0.00	0.00	0.00	0.00	26.98
HORNITOS GILES RCH	INC	T	0.00	0.47	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
HORNITOS USCE	23.21E	0.00E	0.00E	0.40E	0.61	4.73	3.11	3.48	5.60	4.98	0.30	0.00	0.00	0.00	0.00	0.00	22.81
JERSEYDALE G S	43.16	0.04	0.30	0.45	0.83	7.42	5.20	7.91	13.57	6.77	0.67	0.00	0.00	0.00	0.03	0.00	42.40
MARIPOSA REYNOLDS	34.34	0.03	0.04	0.41	0.44	6.66	4.24	6.65	9.60	5.93	0.26	0.02	0.06	0.00	0.00	0.03	33.89
MARIPOSA R S (USCE)	33.22E	0.00E	0.00E	0.30E	0.40E	6.28	4.58	7.24	8.72	5.10	0.50E	0.00E	0.10E	0.00E	0.00E	0.00E	32.92E
STANISLAUS RIVER B3																	
ANGELS CAMP	39.59	0.00	0.02	0.26	0.68	5.69	4.74	11.68	9.62	5.98	0.74	0.13	0.05	0.00	0.00	0.09	39.40
BEARDSLEY DAM	46.46	T	0.58	0.17	1.85	6.27	5.57	12.08	12.06	5.31	1.11	0.72	0.74	0.05	0.18	0.07	46.01
BEAR VALLEY-ALPINE	INC	T	0.35	1.38	2.60	5.16	9.22	NR	NR	NR	NR	NR	NR	NR	NR	NR	INC
COLUMBIA	40.19	0.00	0.00	0.10	0.04	7.20	4.91	10.84	10.00	5.93	0.91	0.26	0.00	0.00	0.00	T	40.09
COPPEROPOLIS (USCE)	32.02E	0.00E	0.00E	0.18E	0.61	5.00	3.93	8.69	7.93	5.24	0.44	0.00	0.00	0.00	0.00	0.09	31.93
PINECREST STRAWBERRY	43.59	0.00	0.30	0.35	2.37	6.13	6.79	9.37	10.15	5.93	0.84	1.26	0.10	0.00	0.15	0.08	43.17
SPRING GAP FOREBAY	33.16	0.00	0.38	0.00	0.58	5.48	5.99	10.71	9.90	4.54	0.97	0.32	0.29	0.00	0.00	0.12	38.90
TULLOCK DAM	28.12	0.00	0.00	T	0.74	4.51	3.68	6.52	7.15	5.32	0.20	0.00	0.00	0.00	T	T	28.12
TUOLUMNE RIVER B4																	
DON PEDRO RESERVOIR	26.92	T	0.00	0.00	0.36	5.22	3.17	5.50	7.48	5.05	0.11	T	0.03	0.00	0.00	0.18	27.10
EARLY INTAKE P H	37.31	T	0.14	0.25	1.03	5.54	5.37	7.59	10.04	6.01	0.87	0.23	0.24	0.00	0.12	0.04	37.08
HODGDON MEADOW	52.51E	0.09	0.42	0.52	3.03	8.59	6.37	10.20E	14.25	6.91	1.00	0.97	0.16	0.00	0.08	T	51.56E
LAKE ELEANOR	INC	0.00E	0.20E	0.50E	RE												
MOCCASIN	33.25	0.00	0.01	0.00	0.47	6.00	4.11	6.67	9.35	6.27	0.33	T	0.04	0.00	0.00	T	33.24
TUOLUMNE MAINT YARD	33.69	T	0.00	T	0.62	6.63	5.08	3.90	10.30	5.28	1.88	0.00	T	0.00	0.00	T	33.69
FRESNO-CHOWCHILLA R B6																	
AHWAHNEE 2 NNW	32.76	0.10	0.14	0.57	0.68	5.40	3.90	6.19	8.65	6.40	0.51	0.19	0.03	0.00	T	0.08	32.03
COARSEGOLD	32.80	0.06	T	0.39	0.47	6.17	3.80	5.32	9.78	6.32	0.40	T	0.09	0.06	T	0.39	32.80
DAULTON	18.83	0.00	0.00	0.24	0.46	4.40	2.21	2.42	5.39	3.29	0.33	0.00	0.09	0.00	0.00	0.00	18.59
NIODEN VALLEY	37.07	0.02	0.06	0.41	0.51	7.70	3.74	6.61	10.87	6.30	0.82	0.01	0.02	0.00	T	0.02	36.60
MARIPOSA 8 ESE	38.30	0.04	0.12	0.61	0.54	6.39	4.22	7.64	11.44	6.95	0.28	0.02	0.05	0.00	0.00	0.00	37.53
OAKHURST	34.91	0.00	0.00	0.00	1.41	5.63	3.81	6.72	10.75	6.15	0.44	0.00	0.00	0.00	0.00	0.00	34.91
RAYMOND 10 N	29.89	0.00	0.00	0.47	0.50	5.93	3.22	5.62	8.89	5.09	0.17	0.00	0.00	0.00	0.00	0.04	29.46
RAYMOND 12 NNE	27.38	0.00	0.05	0.50	0.32	5.03	2.82	4.63	8.11	5.74	0.18	0.00	0.00	0.00	0.00	0.10	26.93
ROCKY VILLAGE	INC	0.00E	0.00E	0.40E	RE												
TRIANGLE-DESMOND	41.99	0.06	0.16	0.59	0.79	6.61	4.89	7.89	13.40	7.06	0.46	0.05	0.03	0.00	0.03	0.03	41.24
WHITE ROCK-PRESTON (USCE)	24.37E	0.00E	0.00E	0.30E	0.40E	6.12	2.40	3.38	6.60	4.91	0.26	0.00E	0.00E	0.00E	0.00E	0.00E	24.07E
SAN JOAQUIN RIVER B7																	
BIG CREEK P H 1	40.28	0.03	1.19	2.40	1.93	6.10	3.90	7.41	9.40	5.95	0.87	1.07	0.03	0.00	0.08	0.00	36.74
BIG CREEK P H 2	38.85	0.06	0.35	2.24	0.83	6.18	4.03	7.29	10.95	5.64	0.73	0.49	0.06	0.00	0.00	0.00	36.20
BIG CREEK P H 3	31.82	0.00	0.02	1.45	1.19	4.59	3.12	6.21	7.66	6.53	0.86	0.13	0.06	0.00	0.00	0.00	30.32
BIG CREEK P H 8	34.39	0.05	0.65	2.04	0.92	5.12	4.21	5.69	9.04	5.54	1.00	0.03	0.10	0.00	0.00	0.00	31.65
CRANE VALLEY P H	43.56	0.04	0.04	0.93	1.71	6.74	4.76	7.91	14.05	6.83	0.41	0.13	0.01	0.00	0.00	0.02	42.57
FRIANT STILLWELL	26.27	0.00	0.00	0.55	0.47	5.22	2.81	3.69	7.64	5.44	0.45	0.00	0.00	0.00	0.00	0.00	25.72
MOUNTAIN REST	38.23	0.05	0.03	1.16	1.06	6.23	3.58	8.00	10.51	6.78	0.76	0.07	0.00	0.00	0.02	0.00	37.01
SAN JOAQ VAL WESTSIDE B8																	
PANOCHE 2 W	15.20	0.0	0.0	0.30	0.77	3.32	1.56	2.90	4.55	1.76	0.04	0.00	0.00	0.00	0.00	0.00	14.90

TABLE A-2 (Cont.)

PRECIPITATION DATA

PRECIPITATION IN INCHES

STATION NAME	TOTAL JULY 1 TO JUNE 30	1972						1973									TOTAL OCT 1 TO SEPT 30
		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	
TULARE LAKE BASIN																	
TULARE LAKE VAL FLOOR C0																	
ARVIN	9.08	0.00	0.00	0.07	0.83	1.17	1.55	1.98	0.62	2.77	0.04	0.05	0.00	0.00	0.00	0.00	9.01
AVENAL ORCHARD	13.12	0.00	0.00	0.06	1.00	2.12	0.32	4.33	3.46	1.83	0.00	0.00	0.00	0.00	0.00	0.00	13.06
BUENA VISTA RCH M&L	6.17	0.00	0.00	0.02	0.19	0.91	0.89	1.08	0.75	2.33	0.00	0.00	0.00	0.00	0.00	0.00	6.15
BUENA VISTA RCH M&L #2	6.30	0.00	0.00	T	0.10	1.28	0.83	1.09	0.62	2.38	0.00	0.00	0.00	0.00	0.00	0.00	6.30
CANTUA RCH	9.43	0.00	0.00	0.23	0.50	2.85	0.98	1.60	2.14	1.10	0.03	0.00	0.00	0.00	0.00	0.00	9.20
COALINGA CDF	10.30	0.05	0.00	0.14	0.27	2.33	0.54	2.84	2.41	1.66	0.00	0.06	0.00	0.00	0.03	0.00	10.14
COIT RCH HQ	10.13	0.00	0.00	0.04	0.30	3.09	0.78	1.87	2.77	1.22	0.06	0.00	0.00	0.00	0.00	0.00	10.09
CORCORAN EL RICO 1	11.71	0.00	0.00	0.09	0.06	2.12	0.63	4.11	2.69	1.91	0.10	0.00	0.00	0.00	0.00	0.00	11.62
DELANO GOVT CAMP	11.10E	0.00	T	T	1.04	2.11	0.80E	2.80E	1.84	2.56	0.06	T	0.00	0.00	0.16	0.00	11.26E
DEVILS DEN SLF	11.36	0.00	0.09	T	0.58	2.02	0.33	3.75	2.46	1.91	0.00	0.22	0.00	0.00	0.00	0.00	11.27
DIGIORGIO	9.42	0.00	0.00	T	0.92	1.20	1.41	2.22	0.75	2.92	0.00	0.00	0.00	0.00	0.00	0.00	9.42
DINUBA ALTA I D	15.94	0.00	0.00	0.36	0.43	3.23	1.11	3.79	2.97	3.91	0.14	0.00	0.00	0.00	0.00	0.00	15.58
FIVE POINTS DIENER	11.07	0.00	0.00	0.17	0.33	2.60	0.80	2.42	3.15	1.58	0.02	0.00	0.00	0.00	0.00	0.00	10.90
FOUNTAIN SPRINGS F S	18.59	0.00	0.00	0.00	2.17	2.75	1.74	4.85	2.52	4.12	0.44	0.00	0.00	0.00	0.01	0.00	18.60
FRESNO CO WESTSIDE FD	9.34	0.02	0.00	0.12	0.09	1.94	0.53	2.38	2.73	1.30	0.18	0.05	0.00	0.00	0.02	0.00	9.22
GIN YARD	6.00	0.00	0.00	T	0.07	0.81	0.74	1.22	0.63	2.53	0.00	0.00	0.00	0.00	0.00	0.00	6.00
HANFORD REFINERY	12.87	0.00	0.00	0.28	0.30	3.13	0.79	2.97	2.27	3.04	0.09	0.00	0.00	0.00	0.00	0.00	12.59
HURON	12.45	0.00	0.00	0.15	0.40	2.89	0.76	2.85	3.67	1.73	T	0.00	0.00	0.00	0.00	0.00	12.30
IVANHOE I D	14.22	T	0.00	0.00	0.40	3.08	3.03	0.28	3.28	3.79	0.36	T	0.00	0.00	0.00	0.00	14.22
KETTLEMAN HILLS	10.21	0.04	0.00	0.05	0.43	1.85	0.36	3.59	2.00	1.41	0.48	0.00	0.00	0.00	0.00	0.00	10.12
KINGSBURG 2 S	14.40	0.00	0.00	T	0.33	3.61	1.03	3.16	2.69	3.49	0.09	T	0.00	0.00	0.00	0.00	14.40
MAGUNDEN	9.36	0.00	0.00	0.00	1.08	1.68	1.29	2.07	0.71	2.47	0.03	0.03	0.00	0.00	0.00	0.00	9.36
MENDOTA MURIETTA RCH	9.08	T	0.00	0.00	0.34	2.32	0.66	1.87	2.46	1.17	0.26	T	T	0.00	T	0.00	9.08
NORTH BELRIDGE	6.91	0.00	0.06	0.00	0.08	0.99	0.22	1.55	1.96	2.05	0.00	0.00	0.00	0.00	0.00	0.00	6.85
OILFIELD F S	11.88	0.00	0.00	0.17	0.71	2.55	0.60	2.61	3.62	1.56	0.06	T	0.00	0.00	0.16	0.00	11.87
OLD RIVER 3 W	14.24	0.00	T	0.01	0.94	1.28	0.96	1.51	0.85	2.23	T	0.00	0.00E	0.00E	0.00E	0.00E	14.23E
PORTERVILLE 3 W	16.77	0.00	0.00	0.16	1.39	2.97	1.37	3.63	3.36	3.59	0.30	0.00	0.00	0.00	0.00	0.00	16.61
RECTOR	17.45	0.00	0.00	0.03	1.20	3.13	1.55	4.21	3.09	4.13	0.11	0.00	0.00	0.00	0.00	0.00	17.42
REEDLEY MVFD	16.79	0.00	0.00	0.14	0.29	3.95	1.20	3.67	3.27	4.15	0.12	0.00	0.00	0.00	0.00	0.00	16.65
RIVERDALE	9.68	0.00	0.00	0.08	0.17	2.31	0.56	1.62	2.71	2.14	0.09	0.00	0.00	0.00	0.00	0.00	9.60
SANGER 1 NE	13.68	0.00	0.00	0.16	0.12	3.79	1.39	2.60	3.02	2.60	0.00	0.00	0.00	0.00	0.00	0.00	13.52
SANGER R S	14.51	0.00	0.00	0.18	0.18	3.71	1.08	2.63	3.15	3.58	0.00	0.00	0.00	0.00	0.72	0.38	15.43
SAN JOAQUIN	9.69	0.00	0.00	0.16	0.41	2.72	0.95	1.45	2.41	1.48	0.07	0.01	0.03	0.00	0.00	0.00	9.53
SOUTH BELRIDGE	5.96	0.00	T	T	0.25	0.96	0.47	1.37	1.70	1.21	0.00	0.00	0.00	0.00	0.00	0.00	5.96
SOUTH LAKE FARMS NO	12.08	0.00	0.00	T	0.03	2.22	0.52	4.30	2.67	1.95	0.39	T	0.00	0.00	0.00	0.00	12.08
TRANQUILLITY GLOTZ	10.47	T	0.00	0.13	0.45	2.87	0.99	1.80	2.65	1.48	0.10	T	T	0.00	T	0.00	10.34
TULARE	15.44	0.00	0.00	0.00	0.67	3.07	1.03	4.25	2.75	3.67	0.00	0.00	0.00	0.00	0.00	0.00	15.44
U S COTTONFIELD STA	8.63	0.00	0.00	0.00	0.64	1.67	0.81	2.07	1.04	2.40	0.00	0.00	0.00	0.00	0.00	0.00	8.63
VESTAL	14.86	0.00	0.00	T	1.20	2.95	1.39	3.64	2.34	3.10	0.22	0.02	0.00	0.00	0.00	0.00	14.86
WILBUR DITCH	12.07	0.00	0.00	T	T	2.34	0.54	4.27	2.53	1.96	0.43	T	0.00	0.00	0.00	0.00	12.07
KINGS RIVER C1																	
BENNER RANCH	33.39	T	0.05	0.27	1.20	6.47	3.69	6.87	7.70	6.76	0.27	0.11	0.00	0.00	0.10	0.00	33.17
BLASTINGAME	26.34	T	0.00	0.58	0.39	5.80	2.40	3.97	6.54	6.39	0.27	T	0.00	0.00	0.00	0.00	25.76
FINEHURST	39.40	0.00	0.01	0.33	1.41	6.77	3.63	9.57	8.55	7.85	0.96	0.32	0.00	0.00	0.00	0.00	39.06
SQUAW VALLEY - FRESNO	29.09	0.00	0.00	0.26	1.14	5.05	2.44	5.19	6.01	6.00	0.30	0.00	0.00	0.00	0.00	0.00E	28.83E
TRIMMER R S	31.45	0.00	0.00	0.37	0.90	5.85	2.61	7.81	7.92	5.62	0.37	0.00	0.00	0.00	0.00	0.37	31.45
WISNON LAKE	39.95	0.00	2.14	1.71	1.14	4.84	5.03	11.51	6.50	5.95	0.34	0.73	0.06	0.00	0.14	0.00	36.24
KAWEAH RIVER C2																	
KAWEAH P H #3	30.92	0.00	0.00	0.73	0.72	5.21	3.64	9.31	6.94	3.10	0.90	0.37	0.00	0.00	0.00	0.00	30.19
MIRAMONTE HONOR CAMP	31.72	T	T	0.21	0.21	1.36	4.44	8.77	8.35	7.64	0.74	T	0.00	T	0.00	0.00	31.51
TERMINUS DAM	21.19	0.00	0.00	0.04	1.00	3.52	1.93	4.92	4.31	5.18	0.28	0.01	0.00	0.00	T	0.00	21.15
WHITAKER FOREST	INC	T	0.42	0.74	1.67	NR	NR	NR	NR	NR	NR	NR	T	0.00	0.01	0.00	INC
TULE RIVER C3																	
SUCCESS DAM	18.74	0.00	0.03	0.02	1.26	3.21	1.86	4.39	3.62	3.96	0.39	T	0.00	0.00	T	0.00	18.69
TULE RIVER INTAKE	40.44	0.00	0.04	0.05	2.12	5.81	4.91	10.32	7.29	8.57	1.15	0.18	0.00	0.00	0.02	0.00	40.37
TULE RIVER P H	27.76	0.00	0.47	0.02	1.17	4.59	3.21	6.87	5.07	5.70	0.39	0.27	0.00	0.00	0.00	0.00	27.27
GREENHORN MTN C4																	
WOODY	19.28	0.00	0.11	0.00	1.07	3.20	2.28	4.85	2.14	5.06	0.49	0.08	0.00	0.00	0.00	0.00	19.17
KERN RIVER C5																	
ISABELLA DAM	16.32	0.00	0.34	0.03	0.66	3.13	2.48	3.96	2.57	2.65	0.25	0.25	0.00	0.00	0.00	0.00	15.95
KERN CANYON	11.11	0.00	0.16	0.00	0.13	2.20	0.95	3.17	1.03	3.05	0.15	0.27	0.00	0.00	0.00	0.00	10.95
KERN R 3 INTAKE	26.26	0.00	0.42	0.05	0.32	3.84	2.62	6.17	4.21	7.90	0.22	0.51	0.00	0.00	0.06	0.00	25.85
ONYX	12.09	0.00	0.04	0.00	0.22	2.39	1.14	3.08	2.89	1.89	0.10	0.34	0.00	0.00	0.00	0.00	12.05
TEHACHAPI MOUNTAINS C6																	
CUMMINGS VALLEY 2	NR	NR	NR	NR	RE												
KEENE	22.02	0.00	0.11	0.02	1.11	3.13	4.54	3.61	2.07	6.10	0.81	0.49	0.03	0.00	0.00	0.00	21.89
MIL POTRERO	18.02	T	0.25	0.11	0.74	2.63	1.52	4.16	4.62	3.53	0.12	0.34	0.00	0.00	0.00	0.00	17.66
WALKER BASIN	26.30	0.00	0.40	0.00	0.71	4.73	5.42	6.45	3.62	3.81	0.40	0.76	0.00	0.00	0.00	0.00	25.90
EDMONSTON P P	INC	0.00	0.01	0.01	0.08	2.70	2.34	2.39	RE								
TULARE L BAE WESTSIDE C7																	
ANNETTE	15.15	0.00E	0.00E	0.00E	0.09	0.57	3.35	4.14	4.94	2.06	0.00	0.00	0.00	0.00	0.00	0.00	15.15
AVENAL 8 SW	17.02	0.00	0.00	0.05	0.09	3.24	0.74	5.43	4.95	2.44	0.08	0.00	0.00	0.00	0.00	0.00	16.97
AVENAL 6 SSW	15.55	0.05	0.00	0.05	0.12	2.73	0.66	5.07	4.10	2.53	0.24	0.00	0.00	0.00	0.00	0.00	15.45
CHICO RANCHO	18.73	T	T	0.08	0.58	3.95	0.84	4.52	5.99	2.49	0.03	0.25	0.00	0.00	T	0.00	18.65
CHOLAME TWISSELMAN	15.32	0.05	0.00	0.00	0.40	2.25	0.81	4.45	4.53	2.67	0.02	0.14	0.00	0.00	0.05	0.00	15.32
COALINGA ROBERTS RCH	21.52	0.00	0.00	0.00	0.77	4.13	0.88	4.91	7.56	2.96	0.00	0.31	0.00	0.00	0.00	0.00	21.52
DOMENGINE RCH	NR	NR	NR	NR	RE												
FELLOWS	8.68	0.00	0.00	T	1.14	1.59	0.60	1.25	1.69	2.41	0.00	0.00	0.00	0.00	0.01	0.00	8.69
MARICOPA F S	6.30	0.00	0.00	0.00	0.32	0.76	0.58	1.47	1.08	2.09	0.00	0.00	0.00	0.00	0.00	0.00	6.30
MCKITTRICK F S	6.23	0.00	0.00	0.00	0.62	0.89	0.42	1.36	1.41	1.53	0.00	0.00	0.00	0.00	0.00	0.00	6.23
TAFT KTKR	5.99E	0.00	0.00	0.04	0.22	0.90E	0.58	1.45	0.76	2.04	0.00	0.00	0.00	0.00	0.00	0.00	5.99E

TABLE A-3

STORAGE GAGE PRECIPITATION DATA

SAN JOAQUIN VALLEY

Station	Agency	1972-73 Season		
		Measurement Period		Precipitation In Inches
SAN JOAQUIN RIVER BASIN				
STANISLAUS RIVER B3				
HIGHLAND LAKES	DEPT OF WATER RESOURCES	7-12-72	6-29-73	39.8
LAKE ALPINE	DEPT OF WATER RESOURCES	7-12-72	6-29-73	65.5
TUOLUMNE RIVER B4				
TUOLUMNE MEADOW	DEPT OF WATER RESOURCES	7-11-72	6-28-73	39.2
MERCED RIVER B5				
OSTRANDER LAKE	YOSEMITE NATL PARK SERVICE	7-19-72	Fall 73	64.5
SNOW FLATS	DEPT OF WATER RESOURCES	7-11-72	6-28-73	58.7
SAN JOAQUIN RIVER B7				
CHIQUITO CREEK	DEPT OF WATER RESOURCES	7-10-72	6-27-73	52.5
CLOVER MEADOW	DEPT OF WATER RESOURCES	7-10-72	6-27-73	54.2
KAISER MEADOW	SO CALIF EDISON COMPANY	9-25-72	9-11-73	45.0
MAMMOTH POOL	SO CALIF EDISON COMPANY	9-22-72	9- 7-73	38.4
ROSE MARIE MEADOW	SO CALIF EDISON COMPANY	9-14-72	9-11-73	40.7
VERMILION VALLEY	SO CALIF EDISON COMPANY	9-25-72	9-12-73	25.9
TULARE LAKE BASIN				
KINGS RIVER C1				
BARTON FLAT	U S CORPS OF ENGINEERS	9-11-72	9-12-73	29.5
DUSY BENCH	DEPT OF WATER RESOURCES	9- 6-72	9-11-73	30.4
MORAINE CREEK	U S CORPS OF ENGINEERS	9-14-72	Not serviced	
RATTLESNAKE CREEK	U S CORPS OF ENGINEERS	9-12-72	9-14-73	43.5
STATE LAKES	U S CORPS OF ENGINEERS	9-13-72	9-28-73	27.6
SUMMIT MEADOW	DEPT OF WATER RESOURCES	7-17-72	7-27-73	56.97
VIDETTE MEADOW	U S CORPS OF ENGINEERS	9-13-72	9-12-73	53.6
KAWEAH RIVER C2				
ATWELL	U S CORPS OF ENGINEERS	8-21-72	10- 9-73	55.4
BEARTRAP MEADOW	U S CORPS OF ENGINEERS	9-12-72	9-10-73	55.95
GIANT FOREST	U S CORPS OF ENGINEERS	9-12-72	10-10-73	54.20
HOCKETT MEADOW	U S CORPS OF ENGINEERS	8-24-72	10-10-73	51.0
TULE RIVER C3				
EAGLE CREEK	U S CORPS OF ENGINEERS	9-26-72	9-25-73	44.3
HOSSACK (RADIO)	U S CORPS OF ENGINEERS	9-26-72	9-27-73	55.2
MOUNTAIN HOME 2	U S CORPS OF ENGINEERS	9-25-72	9-24-73	48.3
ROGERS CAMP	U S CORPS OF ENGINEERS	9-27-72	9-27-73	46.2
KERN RIVER C5				
CHAGOOPA	U S CORPS OF ENGINEERS	8-24-72	9-25-73	37.6
CRABTREE MEADOW	DEPT OF WATER RESOURCES	9-10-72	9-20-73	31.0
PASCOES	U S FOREST SERVICE	9-27-72	9-26-73	42.2
PORTUGUESE MEADOW	U S CORPS OF ENGINEERS	8- 7-72	9-26-73	56.8
TUNNEL R S	DEPT OF WATER RESOURCES	9- 9-72	9-14-73	28.5
WET MEADOW	U S CORPS OF ENGINEERS	8-23-72	9-25-73	46.8
TULARE LAKE BASIN WESTSIDE C7				
OILFIELDS JOAQUIN RDG	DEPT OF WATER RESOURCES	7-27-72	8-30-73	15.0

APPENDIX B

SURFACE WATER MEASUREMENTS

INTRODUCTION

This appendix presents surface water data for the 1973 water year, which is from October 1, 1972 to September 30, 1973. The data presented consist of daily mean discharge, daily mean gage height, gaging station location, diversion quantities, imported water to report area, exported water from report area, summary tables of monthly and annual unimpaired runoff from major streams, and corrections and revisions to previously published reports.

Each station in this appendix has been assigned an identification number. The first two digits denote the drainage basin as shown below. The remaining digits further identify each station.

HYDROGRAPHIC AREA B SAN JOAQUIN RIVER BASIN	HYDROGRAPHIC AREA C TULARE LAKE DRAINAGE BASIN
B0 - San Joaquin Valley Floor	C0 - Tulare Lake Valley Floor
B3 - Stanislaus River	C1 - Kings River
B4 - Tuolumne River	C2 - Kaweah River
B5 - Merced River	C3 - Tule River
B6 - Fresno-Chowchilla Rivers	C4 - Greenhorn Mountains
B7 - San Joaquin River	C5 - Kern River
B8 - San Joaquin Valley on West Side	C6 - Tehachapi Mountains
	C7 - Tulare Lake Basin on West Side

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

1. Water Resources Data for California
   Part 1, Surface Water Records
   Volume 2: Northern Great Basin and Central Valley
   United States Department of the Interior
   Geological Survey
   Prepared in cooperation with the California Department of Water Resources and with other agencies.

2. Kings River Watermaster Report
   Kings River Water Association

3. Water Supply
   Fresno Field Division, U. S. Bureau of Reclamation

4. Bulletin 120, Summary of Water Conditions in California,
   Department of Water Resources

5. Bulletin 157, Index of Stream Gaging Stations In and Adjacent to California, 1970
   Department of Water Resources
   This index contains the period of record--with number of years missing--and more information for 800± stations in the San Joaquin Valley area. The index also identifies the agency from which a particular record may be obtained.

DAILY MEAN DISCHARGE, DAILY MEAN GAGE HEIGHT

	Page: Daily Mean Discharge	Page: Daily Mean Gage Height
Bean Creek near Coulterville	60	
Bear Creek below Bear Reservoir	53	
at McKee Road near Merced	54	
at Merced Irrigation District West Boundary	55	
Buena Vista Creek near Taft	88	
Burns Creek below Burns Reservoir	56	
Campbell-Moreland Ditch above Porterville	80	
Chowchilla River, West Fork near Mariposa	48	
Cross Creek below Lakeland Canal #2	76	
Delta-Mendota Canal near Tracy	40	
to Mendota Pool	41	
Dry Creek near Modesto	69	105
Eastside Bypass near El Nido	49	
Fresno River Eight Miles West of Madera	47	
Lewis Fork near Oakhurst	44	
Friant-Kern Canal Delivery to Porter Slough	77	
to Tule River	78	
Hubbs-Miner Ditch at Porterville	85	
James Bypass near San Joaquin	39	
Kern River near Bakersfield	87	
Kings River, South Fork, below Empire Weir #2	75	
Mariposa Creek near Catheys Valley	50	
below Mariposa Reservoir	51	
Maxwell Creek at Coulterville	61	
Merced River at Cressey	64	101
below Snelling	63	100
Miami Creek at Highway 49 near Ahwahnee	46	
near Oakhurst	45	
Mustang Creek near Ballico	65	
Orestimba Creek below Highway 33	66	
Owens Creek below Owens Reservoir	52	
Panoche Drain near Dos Palos	58	
Poplar Ditch near Porterville	84	
Porter Slough at Porterville	81	
Porter Slough Ditch at Porterville	82	
Salt Slough near Stevinson	59	
San Joaquin River near Dos Palos	43	
at Fremont Ford Bridge	62	99
below Friant	38	97
at Maze Road Bridge	71	108
near Mendota	42	
near Newman		102
at Patterson Bridge	67	103
near Stevinson	57	98
near Vernalis	74	112
Stanislaus River at Koetitz Ranch	73	111
at Orange Blossom Bridge	72	109
at Ripon		110
Tulare Lake		96
Tule River below Porterville	79	
Tuolumne River at Hickman Bridge	68	104
at Modesto		106
at Tuolumne City	70	107
Vandalia Ditch near Porterville	83	
Woods-Central Ditch near Porterville	86	

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HYDROGRAPHIC AREA AND STREAM BASIN INDEX TO SURFACE WATER MEASUREMENT STATIONS

Station Number		Page: Daily Mean Discharge	Page: Daily Mean Gage Height
	HYDROGRAPHIC AREA B		
	SAN JOAQUIN VALLEY FLOOR		
B00435	Eastside Bypass near El Nido	49	
0470	Salt Slough near Stevinson	59	
0525	Mustang Creek near Ballico	65	
0770	Delta-Mendota Canal to Mendota Pool	41	
0975	Panoche Drain near Dos Palos	58	
3115	Stanislaus River at Koetitz Ranch	73	111
3125	at Ripon		110
3175	at Orange Blossom Bridge	72	109
4105	Tuolumne River at Tuolumne City	70	107
4120	at Modesto		106
4130	Dry Creek near Modesto	69	105
4150	Tuolumne River at Hickman Bridge	68	104
5155	Merced River at Cressey	64	101
5170	below Snelling	63	100
5518	Bear Creek at Merced Irrigation District West Boundary	55	
5525	at McKee Road near Merced	54	
5570	below Bear Reservoir	53	
6170	Owens Creek below Owens Reservoir	52	
6725	Fresno River Eight Miles West of Madera	47	
7020	San Joaquin River near Vernalis	74	112
7040	at Maze Road Bridge	71	108
7200	at Patterson Bridge	67	103
7300	near Newman		102
7375	at Fremont Ford Bridge	62	99
7400	near Stevinson	57	98
7610	near Dos Palos	43	
7710	near Mendota	42	
7885	below Friant	38	97
8735	Orestimba Creek below Highway 33	66	
	MERCED RIVER		
B51250	Maxwell Creek at Coulterville	61	
2580	Bean Creek near Coulterville	60	
6100	Burns Creek below Burns Reservoir	56	
	FRESNO - CHOWCHILLA RIVERS		
B62100	Mariposa Creek below Mariposa Reservoir	51	
2400	near Catheys Valley	50	
4300	Chowchilla River, West Fork near Mariposa	48	
7285	Miami Creek at Highway 49 near Ahwahnee	46	
7300	near Oakhurst	45	
7325	Fresno River, Lewis Fork near Oakhurst	44	
	SACRAMENTO - SAN JOAQUIN DELTA		
B95925	Delta-Mendota Canal near Tracy	40	
	HYDROGRAPHIC AREA C		
	TULARE LAKE VALLEY FLOOR		
C00200	James Bypass near San Joaquin	39	
1120	Kings River, South Fork, below Empire Weir #2	75	
2602	Cross Creek below Lakeland Canal #2	76	
3110	Tulare Lake		96
3169	Tule River below Porterville	79	
3182	Porter Slough at Porterville	81	
3913	Friant-Kern Canal Delivery to Porter Slough	77	
3923	to Tule River	78	
3925	Hubbs-Miner Ditch at Porterville	85	
3948	Woods-Central Ditch near Porterville	86	
3960	Poplar Ditch near Porterville	84	
3965	Vandalia Ditch near Porterville	83	
3970	Campbell-Moreland Ditch above Porterville	80	
3984	Porter Slough Ditch at Porterville	82	
5150	Kern River near Bakersfield	87	
7120	Buena Vista Creek near Taft	88	

SACRAMENTO
SACRAMENTO
AMADOR
CALAVERAS
TUOLUMNE
SAN JOAQUIN
STANISLAUS
MERCED
MADERA
CLARA
STOCKTON
Lodi
Tracy
Ripon
Modesto
Turlock
Merced
Livingston
Newman
Gustine
Los Banos
Oakdale
Sonora
Tuolumne
San Andreas
Jackson
Ione
Galt
Thornton
Mantece
Escalon
Chowchilla
3
4
5
B
8
2110
3255
1400
1158
3185
1290
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4120
4130
0940
9655
1320
1200
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7080
8826
7200
0525
5170
5155
2400
4300
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7375
0470
2100
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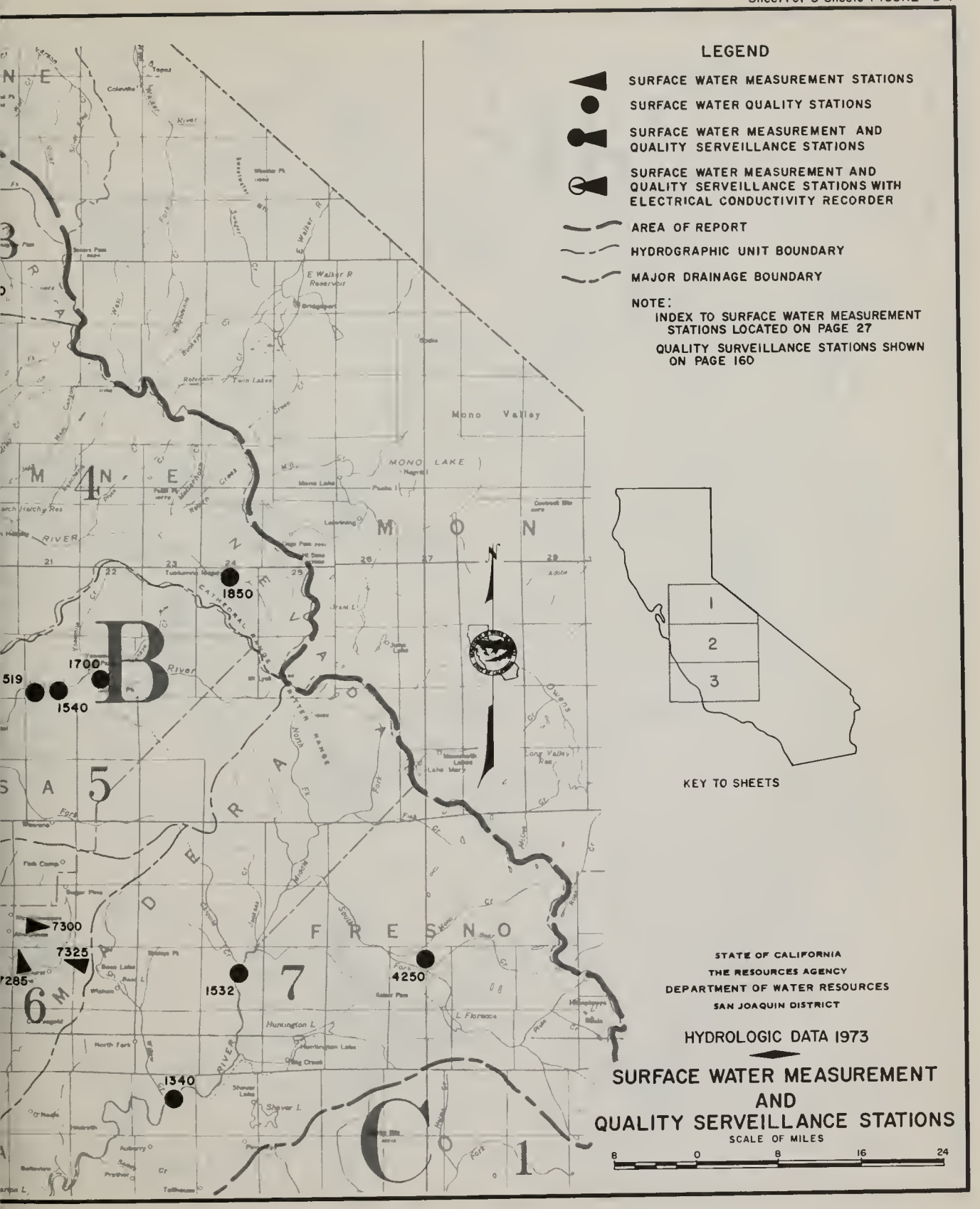
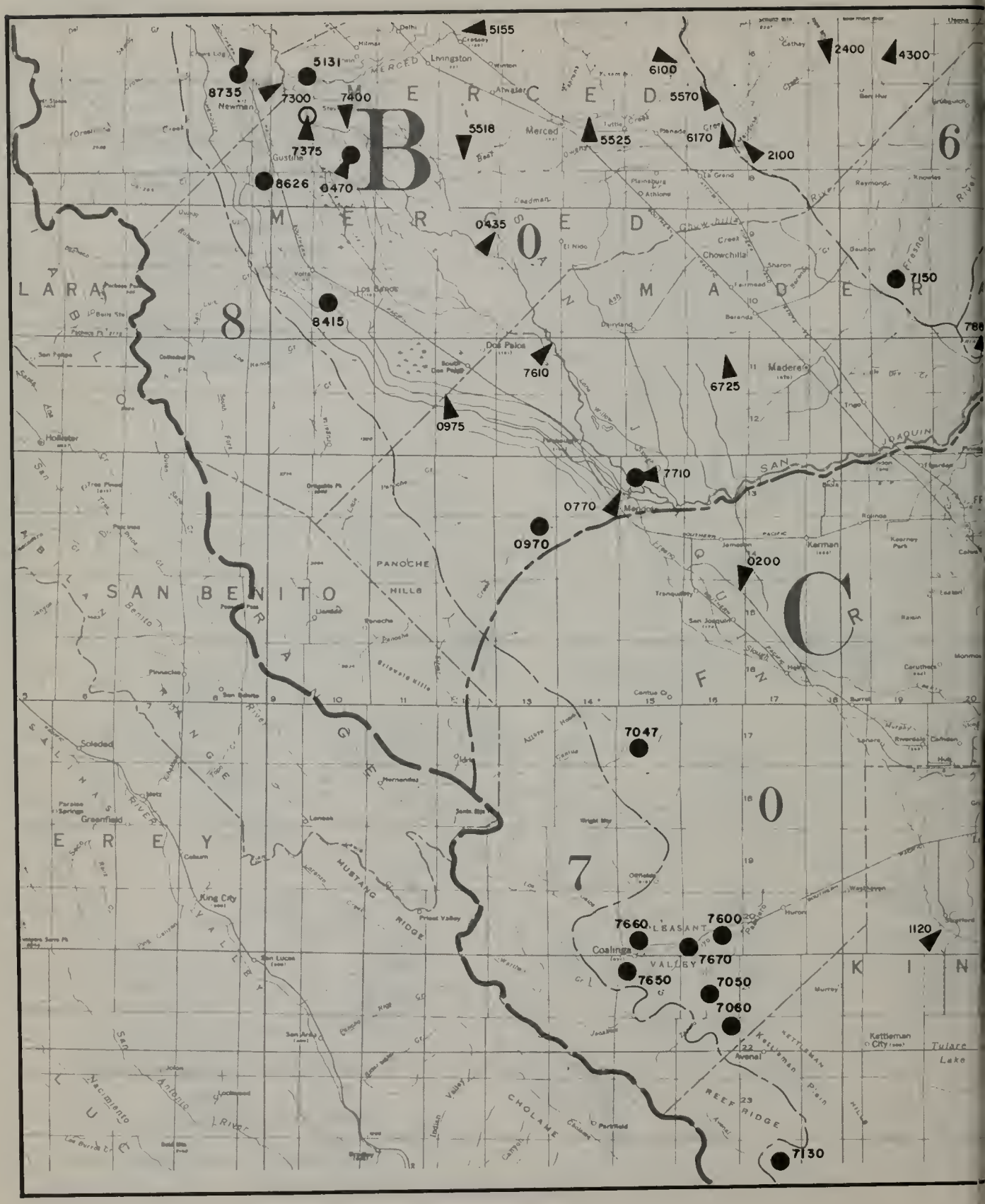
0435
8415


LEGEND
SURFACE WATER MEASUREMENT STATIONS
SURFACE WATER QUALITY STATIONS
SURFACE WATER MEASUREMENT AND QUALITY SERVEILLANCE STATIONS
SURFACE WATER MEASUREMENT AND QUALITY SERVEILLANCE STATIONS WITH ELECTRICAL CONDUCTIVITY RECORDER
AREA OF REPORT
HYDROGRAPHIC UNIT BOUNDARY
MAJOR DRAINAGE BOUNDARY
NOTE:
INDEX TO SURFACE WATER MEASUREMENT STATIONS LOCATED ON PAGE 27
QUALITY SURVEILLANCE STATIONS SHOWN ON PAGE 160
KEY TO SHEETS
1
2
3
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT
HYDROLOGIC DATA 1973
SURFACE WATER MEASUREMENT AND QUALITY SERVEILLANCE STATIONS
SCALE OF MILES
8 0 8 16 24
Mono Valley
MONO LAKE
1850
1700
1540
519
7300
7325
7285
1532
4250
1340
Huntington L.
Shaver L.
L. Florence
Long Valley Res.
Lake Mary
Tioga Lake
Bridgeport
Tuolumne Meadows
Yosemite
Mammoth Lakes
Bass Lake
Auberry
Prather
Tollhouse
Shaver Lake
Huntington Lake
Mono Lake
Lee Vining
Crowley Res.
Hilton Ch.
Mono Hot Springs
Pine Ridge
Sierra Pine
Wishon
Pine Flat Res.
Lake Pine
Dinkey Creek
Cat Mtn.
Tioga Pass
Ansel Adams Wilderness
Yosemite National Park
Devils Postpile Nat. Mon.
Mono Hot Springs
Sierra National Forest
Inyo National Forest
Mono County
Fresno County
Madera County
Tuolumne County
Mono Basin
Owens River
Mono Lake
Long Valley
Mammoth Lakes
Bridgeport


MERCED
MERCED
MADERA
SAN BENITO
FRESNO
KINGS
TULARE
Newman
Gustine
Livingston
Atwater
Merced
Chowchilla
Madera
Dos Palos
Los Banos
Mendota
Coalinga
Avenal
Kettleman City
Tulare Lake
PANOCHE HILLS
MUSTANG RIDGE
CHOLAME
REEF RIDGE
KETTLEMAN
PLEASANT VALLEY
SAN JOAQUIN
8735
5131
7300
7400
7375
8626
0470
5518
5155
0435
8415
7610
0975
7710
0770
0970
7047
6100
5570
5525
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2100
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6725
0200
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7600
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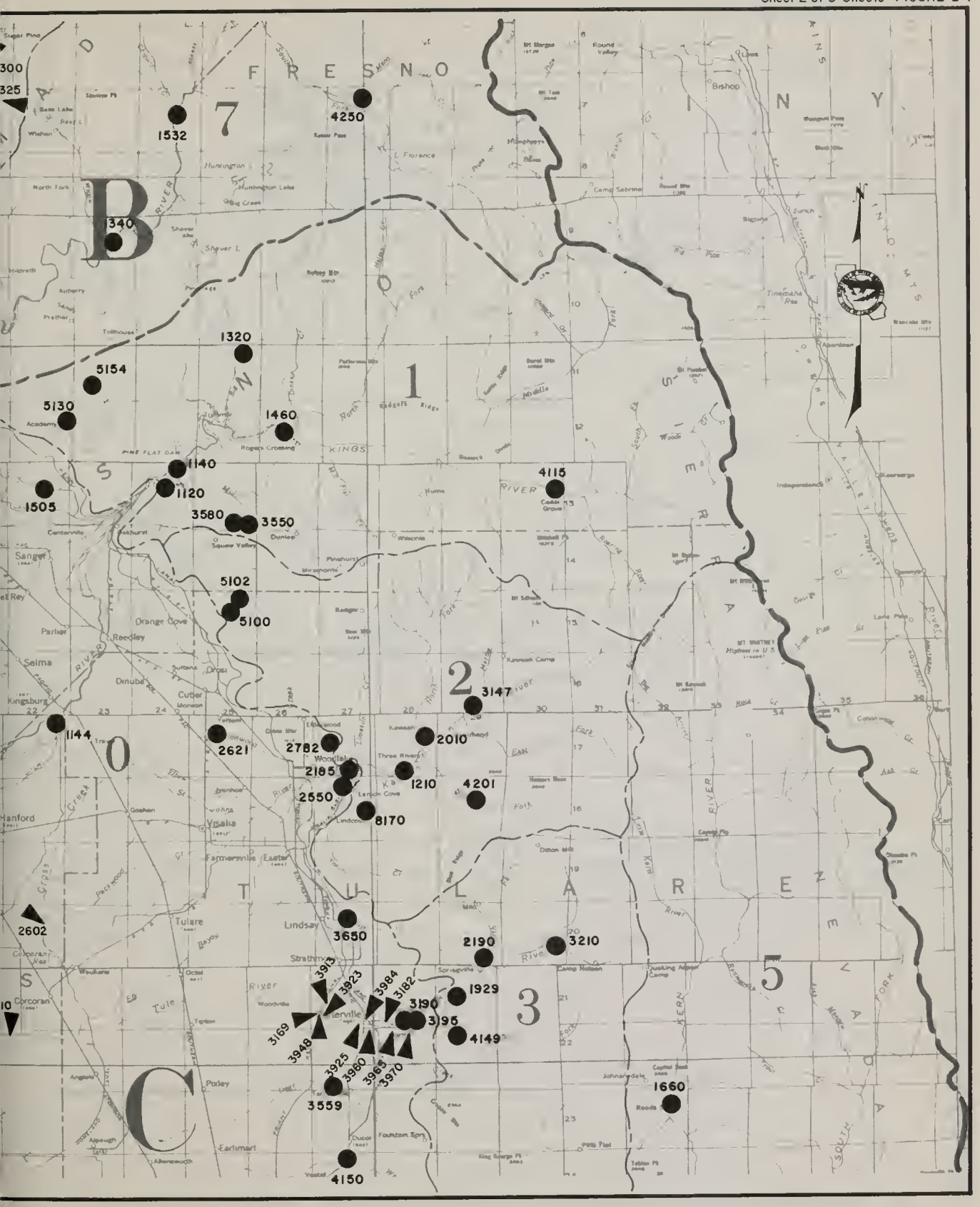
1120


F R E S N O
B
7
1
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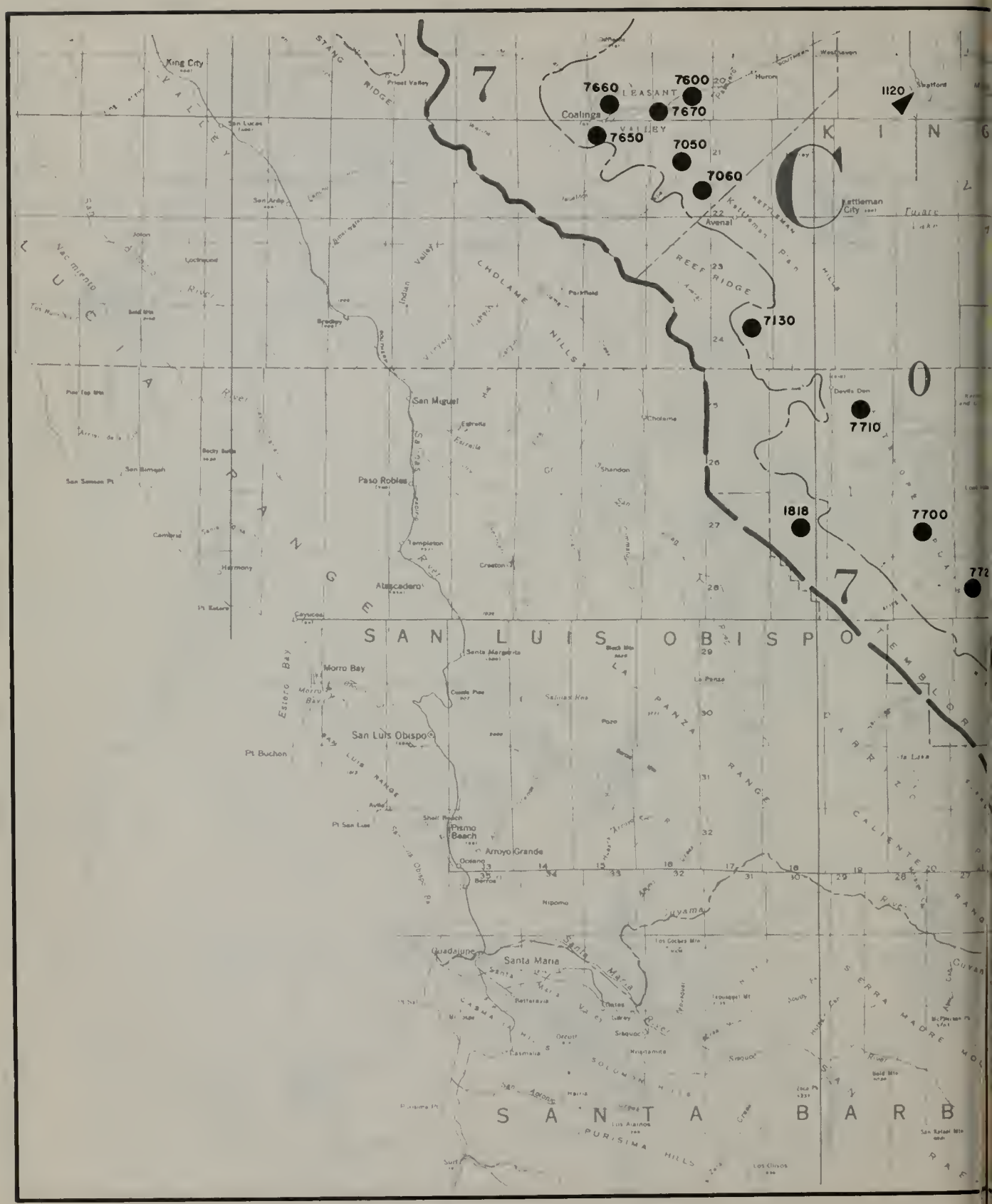
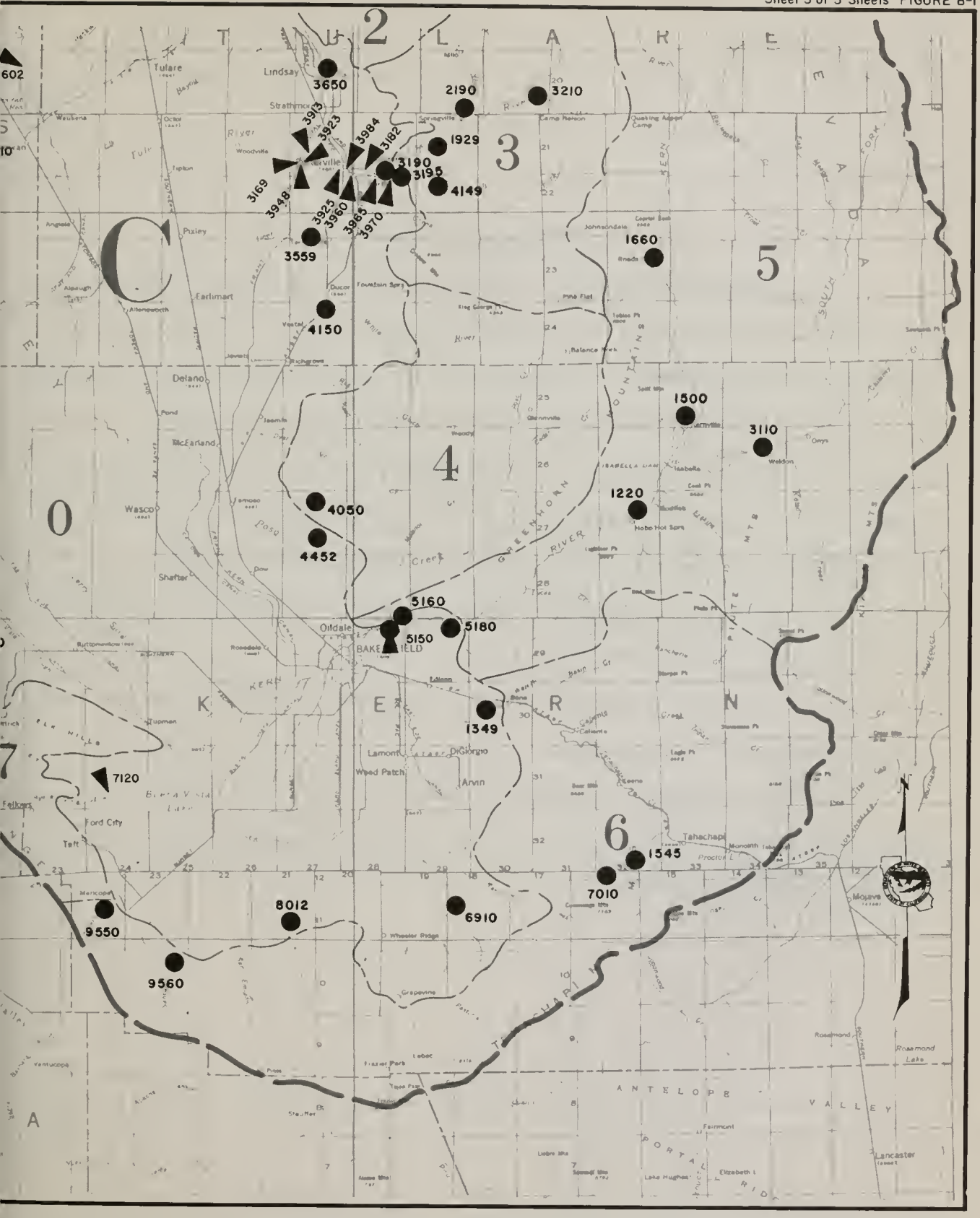
T U L A R E
K I N G S
M A D E R A
K E R N
C
300
325
1532
4250
1340
1320
5154
5130
1460
1140
1120
1505
3580
3550
4115
5102
5100
3147
1144
2621
2782
2010
2185
1210
4201
2550
8170
2602
3650
2190
3210
1929
3190
3196
4149
3159
3948
3925
3960
3965
3970
3559
1660
4150
Sanger
Selma
Kingsburg
Reedley
Dinuba
Hanford
Visalia
Tulare
Lindsay
Corcoran
Porterville
Exeter
Farmersville
Woodlake
Orange Cove
Parlier
Cutler
Pinehurst
Squaw Valley
Dunlap
Centerville
Academy
Tollhouse
Shaver L
Huntington L
Huntington Lake
Camp Sabrina
Bishop
Zurich
Aberdeen
Round Valley
Lemon Cove
Three Rivers
Springville
Strathmore
Porterville
Paige
Earlimart
Alpaugh
Pixley
Ducor
Vestal
Fountain Spgs
Johnsondale
Roads
Kennedy Camp
Camp Nelson
Dillon Mill
Cedar Grove
Independence
Lone Pine
Lawson
Cottonwood
Tehachapi
Tehachapi Pk
Pine Flat
Pine Flat Dam
Kings River
Tule River
Kern River
Deer Creek
Mt Whitney
Highest in U.S.
Mt Sargent
Mt Tom
Mt Humphreys
Mt Sill
Mt Darwin
Mt Mendel
Mt Schurz
Mt Brewer
Mt Kaweah
Mt Stewart
Mt Silliman
Mt Williamson
Mt Tyndall
Mt Langley
Mt Whitney
Mt Kennedy
Mt Jackson
Mt Pickering
Mt Gardner
Mt Hilgard


7660
7600
7670
7650
7050
7060
7130
7710
1818
7700
1120
Coalinga
King City
San Miguel
Paso Robles
Atascadero
Morro Bay
San Luis Obispo
Pt Buchon
Pismo Beach
Arroyo Grande
Nipomo
Santa Maria
Avenal
Lettleman City
Huron
Westhaven
Stratford
Parkfield
Cholame
Shandon
Creston
Templeton
Cambria
Harmony
San Simeon Pt
Cayucos
Los Osos
Los Alamos
Los Olivos
Los Cochos Mtn
Santa Margarita
Pozo
Oceano
Guadalupe
Orcutt
Casmalia
Sisquoc
Nipomo
Santa Maria
Buellton
Solomon Hills
Purisima Hills
Reef Ridge
Cholame Hills
Stang Ridge
Lemoncito
Indian Valley
Salinas River
Nacimiento River
Estero Bay
Pt San Luis
Pt Estero
Pt Sur
Pt Piedras Blancas
Pt Sal
Pt Conception
Pt Arguello
Pt San Luis
Pt Buchon
Pt Pedernales
Pt Sur
Pt Sur
Pt Sur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C
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L
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Tulare
Lindsay
Strathmore
Porterville
Pixley
Earlimart
Delano
McFarland
Wasco
Shafter
Oildale
BAKERSFIELD
Lamont
DiGiorgio
Weed Patch
Arvin
Tehachapi
Mojave
Lancaster
Rosamond
Rosamond Lake
Taft
Ford City
Maricopa
Fairmont
Lake Hughes
Elizabeth L
ANTELOPE VALLEY
PORTAL RIDGE
602
3650
2190
3210
3913
3923
3984
3182
1929
3190
3195
4149
3169
3948
3925
3960
3965
3970
3559
1660
4150
1500
3110
1220
4050
4452
5160
5150
5180
1349
7120
1545
7010
8012
6910
9550
9560

UNIMPAIRED RUNOFF

Unimpaired runoff is defined as the flow that occurs naturally at a point in a stream if there were: (1) no upstream controls such as dams or reservoirs; (2) no artificial diversions or accretions; and, (3) no change in ground water storage resulting from development. The computed natural or unimpaired runoff values are considered to be the flows that would occur if no impairments were upstream from the measurement points.

Table B-1 presents annual unimpaired runoff in percent of average for major streams.

Table B-2 presents monthly unimpaired runoff in percent of average for major streams.

The average unimpaired runoff is in thousands of acre-feet and was computed from the 50-year period October 1920 through September 1970.

TABLE B-1

ANNUAL UNIMPAIRED RUNOFF

In percent of average

Water Year	Stanislaus River Inflow to Melones	Tuolumne River Inflow to Don Pedro	Merced River Inflow to Exchequer	San Joaquin River Inflow to Millerton	San Joaquin River near Vernalis (b)	Kings River Inflow to Pine Flat	Kaweah River Inflow to Terminus	Tule River Inflow to Success	Kern River Inflow to Isabella
Average Annual Runoff (a)	1085	1789	920	1659	5452	1568	404	133	629
1930-31	29	34	29	29	30	30	28	19	29
1931-32	125	118	121	123	121	133	129	104	111
1932-33	56	63	56	67	62	75	70	60	68
1933-34	39	45	39	42	42	42	32	15	37
1934-35	112	118	127	116	118	103	89	67	72
1935-36	122	121	125	112	119	120	121	128	119
1936-37	102	112	132	133	120	149	168	230	176
1937-38	188	192	226	222	206	209	216	267	205
1938-39	48	55	52	56	53	62	61	62	72
1939-40	129	124	119	113	121	114	127	158	111
1940-41	123	140	158	160	146	162	159	177	198
1941-42	137	133	140	136	136	128	122	102	119
1942-43	144	133	140	124	134	129	166	274	159
1943-44	62	73	74	76	72	75	78	77	92
1944-45	118	117	119	129	121	132	136	153	128
1945-46	109	105	102	104	105	103	88	71	103
1946-47	58	62	61	68	63	71	66	39	68
1947-48	83	79	75	73	77	64	65	48	53
1948-49	69	70	69	70	70	61	54	37	47
1949-50	99	87	78	79	85	82	75	47	69
1950-51	156	139	133	112	133	102	104	116	84
1951-52	177	167	170	171	171	182	204	241	221
1952-53	89	86	68	74	80	74	76	74	86
1953-54	82	81	73	79	79	83	76	67	80
1954-55	63	64	58	70	64	71	68	49	56
1955-56	174	177	182	178	178	162	180	157	139
1956-57	82	80	70	80	79	79	73	49	69
1957-58	155	148	153	159	153	157	159	168	167
1958-59	54	56	50	57	55	52	38	24	43
1959-60	55	59	52	50	54	45	45	36	44
1960-61	37	41	34	39	39	36	29	15	28
1961-62	92	99	101	116	103	118	98	65	104
1962-63	117	115	107	117	115	119	124	89	117
1963-64	60	64	49	56	58	54	57	45	50
1964-65	164	154	145	137	149	123	121	102	109
1965-66	65	73	73	78	73	77	61	35	64
1966-67	178	174	187	195	182	207	254	281	251
1967-68	59	57	46	52	54	51	54	48	73
1968-69	203	207	240	244	223	271	314	375	351
1969-70	122	108	95	87	102	82	88	91	94
1970-71	98	92	79	85	89	74	73	62	66
1971-72	71	64	63	66	66	54	42	26	39
1972-73 (c)	112	115	122	123	118	133	152	169	141

(a) Average unimpaired runoff in thousands of acre-feet computed from the 50-year period October 1920 through September 1970.
(b) Figures were computed from summations of unimpaired runoff at foothill stations on major tributaries only and do not include runoff from minor tributaries and from valley floor.
(c) Percent figures are preliminary values and subject to revision.

TABLE B-2

MONTHLY UNIMPAIRED RUNOFF (a)

In percent of average

Month		Stanislaus River Inflow to Melones	Tuolumne River Inflow to Don Pedro	Merced River Inflow to Exchequer	San Joaquin River Inflow to Millerton	San Joaquin River near Vernalis (b)	Kings River Inflow to Pine Flat	Kaweah River Inflow to Terminus	Tule River Inflow to Success	Kern River Inflow to Isabella
October	Percent	289	87	102	123	136	109	72	96	74
	Average	8	14	6	16	45	16	4	1	14
November	Percent	65	79	70	112	83	100	85	112	85
	Average	24	45	20	30	119	28	8	4	17
December	Percent	86	90	67	76	81	73	57	62	55
	Average	52	92	46	62	253	54	21	11	28
January	Percent	174	125	118	118	133	130	163	197	107
	Average	67	108	56	69	300	59	22	14	28
February	Percent	151	134	154	135	142	109	123	140	99
	Average	85	140	80	95	400	80	30	19	32
March	Percent	112	104	154	102	114	105	148	169	82
	Average	112	168	90	128	500	106	38	24	49
April	Percent	113	94	73	105	98	98	113	150	119
	Average	196	282	148	236	863	214	64	24	66
May	Percent	140	149	155	165	153	174	188	214	193
	Average	290	446	242	430	1408	429	105	22	145
June	Percent	46	118	123	125	109	149	192	207	178
	Average	179	352	168	369	1069	370	76	10	125
July	Percent	55	64	80	80	72	102	133	240	142
	Average	52	113	48	158	370	150	26	3	63
August	Percent	133	106	98	97	104	106	144	431	137
	Average	13	20	10	46	89	44	7	1	26
September	Percent	84	0	74	86	65	89	124	0	119
	Average	6	8	4	18	36	17	3	0	15
1972-73 Water Year	Percent	112	115	122	123	118	133	152	169	141
	Average	1085	1789	920	1659	5452	1568	404	133	629

(a) Percent figures are preliminary values and subject to revision. Average unimpaired runoff in thousands of acre-feet computed from the 50-year period October 1920 through September 1970.

(b) Figures were computed from summations of unimpaired runoff at foothill stations on major tributaries only and do not include runoff from minor tributaries and from the valley floor.

DAILY MEAN DISCHARGE

The streamflow data shown in Table B-3 are arranged, for each stream or stream system, in downstream order. Stations on a tributary entering between two main stem stations are listed between those stations, and in downstream order on that tributary. A stream gaging station is named after the stream and the nearest post office (Merced River at Cressey) or well-known landmark (San Joaquin River at Fremont Ford Bridge).

The discharges estimated for periods of no record or invalid record, are shown with the letter "E". Also, qualified by the letter "E" are discharges obtained from extended ratings which exceed 140 percent of the highest measured flow-rate on which the rating curve was based.

The discharge figures in this table have been rounded off as follows:

1. Daily flows - second-feet

0.0	- 9.9	nearest	Tenth
10	- 999	"	Unit
1,000	- 9,999	"	Ten
10,000	- 99,999	"	Hundred
100,000	- 999,999	"	Thousand

2. Monthly means - second-feet

0.0	- 99.9	nearest	Tenth
100	- 9,999	"	Unit
10,000	- 99,999	"	Ten
100,000	- 999,999	"	Hundred

3. Monthly and yearly totals - acre-feet

0.0	- 9,999	nearest	Unit
10,000	- 99,999	"	Ten
100,000	- 999,999	"	Hundred
1,000,000	- 9,999,999	"	Thousand

Those streamflow data received from cooperating agencies are published as received and do not necessarily adhere to the above criteria.

TABLE B-3

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07885	SAN JOAQUIN RIVER BELOW FRIANT

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	106	88	75	54	49	97 E	2060	545	147	144	129	117	1
2	100	87	70	54	47	85 E	2050	99	147	144	140	115	2
3	97	87	71	54	46	88 E	2040	99	147	147	149	115	3
4	97	80	68	54	46	110 E	2040	99	147	147	149	112	4
5	97	70	62	54	49	82 E	2040	99	149	149	149	106	5
6	102	70	62	55	55	88 E	2030	99	151	147	149	104	6
7	110	70	58	55	85	97 E	2020	99	151	147	144	100	7
8	110	70	52	57	66	88	2000	100 E	507	147	140	95	8
9	115	65	50	62	58	83	2000	100 E	1310	147	140	95	9
10	119	60	52	49	101	80	2000	99 E	2800	144	138	94	10
11	119	57	52	28	459	112	1990	99 E	2770 *	144	138	94	11
12	119	47	52	27	565	87	1990	108 E	2710	142	138	94	12
13	119	47	52	26	2010	80	1980	136 E	2380	142	134	97	13
14	119	44	50	26	2680	73	2000	156 E	1920	142	132	85	14
15	113	24	50	26	3820	71	2000	167 E	932	142	129	83	15
16	108	22	57	41	3730	70	1990	165 E	197	142	127	88	16
17	106	21	65	62	3710	70	1980	166 E	149	147	127	88	17
18	99	22	63	55	3660	68	1980	167 E	144	144	127	88	18
19	95	24	60	58	3650	66	1980	159 E	144	142	125	95	19
20	90	24	54	46	2980 *	177	2020	155 E	144	142	125	97	20
21	90	28	54	46	1260	115	2040	156 E	144	142	125	97	21
22	90	49	54	44	130	134	2040	156 E	144	142	125	95	22
23	88	50	54	41	78	100	2040	157 E	144	140	123	95	23
24	85	54	55	39	78	94	2040	150 E	142	134	123	97	24
25	85	62	55	39	73	90	2030	145 E	144	132	121	100	25
26	85	68	55	39	73	117	2020	147 E	142	134	121	102	26
27	87	71	57	36	99 *	845 *	2010 *	148 E	144	132	121	106	27
28	87	78	55	34	160	1940 *	2010	147 E	142	132	119	106 *	28
29	87	78 *	55 *	46		2110	2010	148 E	142 *	132	117	106	29
30	88	80	54	60 *		2090	1480	148 E	144	132	117 *	104	30
31	88 *		54	54		2080		141 E*		129 *	117		31
MEAN	100	56.6	57.3	45.8	1065	371	1997	147	619	141	131	99.0	MEAN
MAX.	119	88	75	62	3820	2110	2060	545	2800	149	149	117	MAX.
MIN.	85	21	50	26	46	66	1480	99	142	129	117	83	MIN.
AC. FT.	6150	3360	3520	2820	59100	22780	118800	9040	36850	8670	8050	5890	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM DAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM DAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
394	3900	7.10	2	14	2200	21	1.76	11	17	Daily Mean	285100

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.O.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 59 04	119 43 24	SW 7 11S 21E	77,000 12,400[a]	23.8 11.69	12-11-37 6-6-69	OCT 07-DATE		1938		294.00	USGS

Station located 2 miles downstream from Friant Dam and 1.5 miles downstream from Cottonwood Creek. Flow regulated by Millerton Lake beginning in 1944, and by other upstream reservoirs. Records furnished by U. S. Geological Survey. Drainage area is 1,675 square miles.

[a] Maximum flows since construction of Friant Dam in 1944.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C00200	JAMES BYPASS NEAR SAN JOAQUIN

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15						NO FLOW							15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													21
MEAN													MEAN
MAX.													MAX.
MIN.													MIN.
AC. FT.													AC.FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO OH GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
36 39 06	120 10 45	SW 1 15S 16E	5600	12.22	6-7-69	APRIL 29-DATE					

Station located 0.1 mile downstream from Placer Avenue, 3.1 miles north of City of San Joaquin. James Bypass carries diverted flow from Kings River to San Joaquin River. Flow regulated by upstream reservoir, weir, and diversions. Altitude of gage is 165 feet (from U. S. Geological Survey topographic map). This station was established in 1929 and maintained until 1947 by Kings River Water Association. The U. S. Geological Survey maintained it and published the data until 1953. The U. S. Bureau of Reclamation has maintained the station from that time and records for the period 1953 through 1972 are available from their office in Sacramento. Records since 1969 have been published in the Bulletin No. 130 series of reports.

TABLE B-3 (Cont.)
DAILY MEAN DISCHARGE
(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B95925	DELTA-MENDOTA CANAL NEAR TRACY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	3951		0	0	764	755	752	4192	4623	4592	4654	4048	1
2	3919		0	0	540	760	751	4184	4583	4567	4658	3982	2
3	3839		0	0	0	746	800	4144	4609	4590	4699	3895	3
4	3963		0	0	0	754	970	4209	4635	4556	4663	3945	4
5	3961		0	0	0	752	1616	4221	4586	4608	4651	3966	5
6	3987		0	0	3	754	1610	4210	4588	4617	4662	3601	6
7	3970		0	0	0	754	1620	4220	4582	4614	4664	3542	7
8	4003		10	0	0	754	1632	4194	4571	4646	4741	3865	8
9	3973		0	0	946	752	1704	4192	4569	4664	4721	3864	9
10	3982		0	1285	1418	748	1961	4483	4567	4591	4715	3874	10
11	3984		0	1727	1396	702	2082	4585	4587	4671	4639	3870	11
12	3995		0	1731	1279	737	2201	4593	4419	4675	4624	3807	12
13	3999	N	0	1727	928	562	2381	4598	4609	4684	4554	3773	13
14	3980	O	0	1725	831	440	2377	4620	4611	4713	4523	3881	14
15	3977		0	2068	855	434	2377	4622	4601	4686	4533	3884	15
16	3785	F	0	2531	800	434	2482	4606	4606	4670	4540	3887	16
17	3368	L	0	2523	757	432	2583	4598	4591	4660	4559	3748	17
18	3339	O	0	2539	593	435	2733	4619	4591	4661	4524	3758	18
19	3338	W	0	2538	603	472	2730	4608	4589	4673	4533	3747	19
20	3293		4	2509	645	550	2823	4595	4574	4662	4529	3763	20
21	3291		0	2508	660	543	2816	4591	4594	4652	4462	3754	21
22	3282		0	2518	645	726	2996	4590	4599	4649	4465	3746	22
23	3306		0	2530	632	684	3298	4573	4589	4650	4464	3762	23
24	3285		0	2534	607	657	3474	4598	4601	4652	4462	3761	24
25	3325		0	2534	603	642	3649	4590	4600	4578	4183	3747	25
26	3274		0	2384	642	530	3713	4605	4612	4634	4284	3765	26
27	3289		0	2395	790	533	3724	4583	4620	4659	4285	3742	27
28	2234		0	2395	722	567	3971	4584	4616	4659	3993	3738	28
29	1962		0	1683		752	4169	4586	4603	4648	4073	3735	29
30	520		0	467		753	4196	4612	4603	4634	4090	3742	30
31	60		0	770		750		4624		4642	4064		31
MEAN	3369		0	1472	631	641	2473	4478	4591	4641	4491	3806	MEAN
MAX.	4003		10	2539	1418	760	4196	4624	4635	4713	4741	4048	MAX.
MIN.	60		0	0	0	432	751	4144	4419	4556	3993	3542	MIN.
AC. FT.	207307		28	90489	35027	39400	146813	275367	273183	285340	276125	226500	AC. FT.

e — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
2563	4741		8	8	Mean daily	0		11	1		1855579

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 47 45	121 35 05	SW31 1S 4E				JUN 51-DATE		1951		0.00	USGS

Station located at Tracy Pumping Plant at intake to canal, 6 miles southeast of Byron, 10 miles northwest of Tracy. Discharge computed from records of operation of pumps. Water is diverted from Sacramento-San Joaquin Delta by way of Old River and a dredged channel to the Tracy Pumping Plant where it is lifted about 200 feet into canal. Records furnished by U. S. Bureau of Reclamation.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B00770	DELTA-MENDOTA CANAL TO MENDOTA POOL

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	2000	512	135	0	0	0	0	612	2287	2842	3015	2183	1
2	1395	472	150	0	0	0	0	656	2254	2802	2945	2167	2
3	1765	456	150	0	0	0	0	1203	2255	2855	2989	1791	3
4	1757	439	38	0	0	0	0	2013	2266	2873	2989	1795	4
5	1705	373	0	0	0	0	0	2450	2276	2867	2989	1721	5
6	1636	267	0	0	0	0	0	2450	2328	2873	2860	1664	6
7	1564	292	0	0	37	0	0	2201	2391	2904	2656	1661	7
8	1564	303	0	0	50	0	0	1696	2488	2918	2672	1642	8
9	1555	193	0	0	50	0	0	1736	2564	2912	2750	1505	9
10	1516	0	0	0	50	0	0	1979	2549	2915	2780	1458	10
11	1359	0	0	0	13	0	0	2065	2070	2831	2810	1399	11
12	1232	0	0	0	0	0	0	2106	628	2818	2812	1398	12
13	1142	0	0	0	0	0	0	2106	462	2920	2762	1398	13
14	1042	0	0	0	0	0	0	1886	554	2961	2640	1482	14
15	944	0	0	0	0	0	0	1816	558	3052	2812	1593	15
16	863	37	0	0	0	0	30	1821	1039	2879	2894	1682	16
17	753	100	0	0	0	0	125	1897	1701	2895	2900	1618	17
18	735	100	0	0	0	0	200	1999	1971	2808	2882	1610	18
19	711	63	0	0	0	13	200	2100	2211	2900	2882	1671	19
20	698	75	0	0	0	50	200	2203	2340	2919	2824	1765	20
21	699	100	0	0	0	50	250	2205	2523	2874	2813	1825	21
22	698	100	0	0	0	50	400	2080	2616	2920	2791	1850	22
23	698	100	0	0	0	50	499	2137	2777	2798	2836	1878	23
24	686	100	0	0	0	50	600	1941	2838	2691	2714	1841	24
25	657	100	0	0	0	50	617	1984	2816	2630	2563	1705	25
26	679	100	0	0	0	9	624	1984	2850	2681	2409	1768	26
27	797	65	0	0	0	0	723	1984	2757	2854	2385	1862	27
28	745	50	0	1043	0	0	799	1984	2763	2859	2312	1850	28
29	810	50	0	515		0	904	2027	2768	2926	2231	1850	29
30	811	69	0	105		0	950	2193	2768	2931	2222	1693	30
31	732		0	0		0		2288		3049	2183		31
MEAN	1095	151	15.3	53.6	7.1	10.4	237	1929	2156	2870	2720	1711	MEAN
MAX.	2000	512	150	1043	50	50	950	2450	2850	3052	3015	2183	MAX.
MIN.	657	0	0	0	0	0	0	612	462	2630	2183	1398	MIN.
AC. FT.	67397	8957	938	3299	397	639	14049	118617	128269	176446	167252	101803	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
1089	3052		7	15	Mean daily	0		11	10		788063

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC T & R M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 47 11	120 23 05	NW19 13S 15E				JUL 51-DATE					

Station located approximately 2 miles north of Mendota, where Delta-Mendota Canal crosses the Outside Canal, which is 0.8 mile northwest of Bass Avenue crossing (check No. 21). Flow measured by three Sparling meters located at siphon outlet. Records furnished by U. S. Bureau of Reclamation.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07710	SAN JOAQUIN RIVER NEAR MENDOTA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	188	62	0		0	3	66	438	416	505	507	372	1
2	180	54	0		0	1	98	420	416	505	505	372	2
3	176	51	0		0	0	148	374	422	505	493	354	3
4	176	48	0		0	48	560	352	425	507	483	353	4
5	173	45	0		0	102	458	330	427	507	493	350	5
6	170	42	0		0	72	206	330	439	514	495	350	6
7	166	39	0		0	25	221	332	450	517	493	348	7
8	162	39	42		0	10	230	330	450	517	486	352	8
9	160	39	134		0	7	240	318	462	519	488	361	9
10	158	32	150		0	4	252	306	464	519	493	367	10
11	155	29	146		0	2	270	306	462	505	493	376	11
12	155	25	84	N	0	1	282	308	445	493	498	372	12
13	161	23	47	O	0	0	306	312	452	498	500	385	13
14	158	20	24		0	0	326	316	459	500	510	405	14
15	156	18	16		0	0	326	318	442	500	531	405	15
16	161	16	14	F L	48	0	328	318	431	498	531	405	16
17	162	16	13	O	185	0	341	316	429	500	534	403	17
18	162	14	13	W	238	0	361	326	425	500	531	389	18
19	162	12	12		221	0	383	354	420	493	531	387	19
20	162	10	10		110	0	405	352	425	478	529	389	20
21	164	8	8		16	0	389	354	440	478	526	389	21
22	164	6	7		13	0	376	361	452	483	490	389	22
23	164	4	6		96	0	378	363	471	490	469	389	23
24	164	2	4		136	0	385	367	481	490	469	387	24
25	176	0	3		16	0	392	370	493	488	459	387	25
26	191	0	2		13	0	405	372	502	481	442	389	26
27	196	0	1		12	0	403	378	505	483	431	392	27
28	197	0	0		10	0	405	389	510	493	429	394	28
29	197	0	0			7	409	396	510	500	425	371	29
30	197	0	0			16	418	416	505	507	418	197	30
31	138		0			41		416		514	407		31
MEAN	169	21.8	23.7		39.8	10.9	326	353	454	499	487	373	MEAN
MAX.	197	62	150		238	102	560	438	510	519	534	405	MAX.
MIN.	138	0	0		0	0	66	306	416	478	407	197	MIN.
AC. FT.	10420	1300	1460		2210	670	19370	21700	27040	30720	29930	22170	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
231	758	5.28	4	5	0200	0		11	25	0000	166990

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO OH GAGE	REF. DATUM
36 48 37	120 22 35	SW 7 13S 15E	11740a	13.75	6-20-41			1939	1953	142.53	USBR
			8840		6- 1-52	OCT 39-DATE		1954		140.53	USBR

Station located 2.5 miles downstream from Mendota Dam, 4 miles north of Mendota. Records furnished by U. S. Bureau of Reclamation. Drainage area is 3,943 square miles. This station is equipped with DWR radio telemeter. Flow regulated by upstream reservoirs. Summer flows consist mainly of Delta-Mendota Canal water regulated through Mendota Dam for downstream diversions.

a Maximum discharge of record prior to the construction of Friant Dam in 1944.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07610	SAN JOAQUIN RIVER NEAR DOS PALOS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0	0		0	290	0	0	0	0	0	0	1
2		0	0		0	300	0	0	5	0	0	0	2
2		9	0		0	298	0	0	4	0	0	0	3
4		4	0		0	292	0	0	0	0	0	0	4
5		0	0		0	469	0	0	5	0	0	0	5
6		0	0		0	580	0	0	4	5	0	0	6
7		0	0		0	504	0	0	0	12	6	5	7
8		0	0		0	360	4	0	0	3	12	12	8
9		0	30		0	300	12	0	0	0	3	3	9
10		0	182		0	280	12	0	0	9	0	0	10
11		0	218		0	270	12	0	0	8	0	0	11
12		0	220		5	225	12	0	0	0	0	0	12
13	N	0	218	N	4	140	12	0	0	0	0	0	13
14	O	0	146	O	0	116	12	7	9	0	0	0	14
15		0	108		0	104	12	8	3	0	9	0	15
16	F	0	49	F	0	100	12	5	0	9	7	0	16
17	L	0	8	L	73	98	12	0	0	7	0	0	17
18	O	0	0	O	478	92	12	0	0	0	0	0	18
19	W	0	0	W	600	56	12	0	0	0	0	0	19
20		0	0		592	29	12	0	0	0	0	0	20
21		0	0		296	0	12	0	6	0	9	0	21
22		0	0		88	0	12	0	7	0	4	0	22
23		0	0		48	0	12	0	0	0	12	0	23
24		0	0		336	0	12	0	0	9	3	0	24
25		0	0		462	0	12	0	0	7	0	0	25
26		0	0		300	0	12	0	0	5	0	0	26
27		0	0		282	0	8	0	9	0	0	0	27
28		0	0		288	0	0	0	7	0	0	0	28
29		0	0			0	0	0	0	0	0	0	29
20		0	0			0	0	5	0	0	0	0	30
31			0			0		12		0	0		31
MEAN		0.4	38.0		138	158	7.6	1.2	2.0	2.4	2.1	0.7	MEAN
MAX.		9	220		600	580	12	12	9	12	12	12	MAX.
MIN.		0	0		0	0	0	0	0	0	0	0	MIN.
AC. FT.		26	2340		7640	9730	452	73	117	147	129	40	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
28.6	696	3.14	2	24	2300	0		10	1	0015	20694

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 59 38	120 30 02	N½12 11S 13E	8920a 8200	10.52b	6-24-41 6- 5-52	OCT 40-DATE		1945	1944	116.5	USED

Station located 800 feet downstream from the head of Temple Slough, 6.5 miles east of Dos Palos. Records furnished by U. S. Bureau of Reclamation. Drainage area is approximately 4,672 square miles. Flow regulated by upstream reservoirs. Water diverted above station to Central California Irrigation District.

a Maximum discharge of record prior to the construction of Friant Dam in 1944.
b Gage height at site and datum then in use.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B67325	LEWIS FORK FRESNO RIVER NEAR OAKHURST

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	4.8	11	12 *	14	30 *	127	80	115 *	109	29	11 *	3.7	1
2	4.9	12	12	15 *	31	100	73 *	114	107	28 *	11	3.5	2
3	5.7	12	12	17	31	96	72	116	104	27	11	3.4	3
4	7.6	18	28	13	43	93	73	116	102	24	10	2.8 *	4
5	6.8	17	15	13	36	82	81	113	102	23	10	2.3	5
6	5.6 *	10 *	15	13	62	91	94	109	99	21	12	2.4	6
7	5.3	9.6	15	14	139	84	107	111	98 *	20	12	2.3	7
8	7.3	13	16	20	76	81	114	113	97	20	11	2.3	8
9	7.1	10	15	37	53	71	114	116	93	20	10	2.6	9
10	12	9.8	16	25	172 *	74	113	115	75	19	9.2	2.4	10
11	11	17	17	22 *	296	155	121	117	73	18	8.7	2.4	11
12	8.1	12	16	31	184	93	126	118	72	17	8.2	2.5	12
13	7.2	12 *	17	30	118	85	126	121	71	17	6.6	3.4	12
14	8.3	38	18	26	106	74	113	124	71	16	5.2	2.8	14
15	7.3	26	17	25	84	70	103	130	70	18	4.7	2.3	15
16	7.7	33	17	203	74	72	101	128	69	18	5.0	2.7	16
17	9.6	19	85	171	66	70	103	127	57	16	5.9	2.7	17
18	11	15	73	141	60	66	101	126	55	15	4.9	3.2	18
19	9.7	14	57	109	60	64	95	124	53	13	4.7	3.3	19
20	16	13	48	64	56	110	88	125	50	13	4.5	3.4	20
21	12	12	36	55	54	88	88	121	49	13	4.0	3.6	21
22	9.8	13	39	46	53	82	96	121	48	13	4.6	3.9	22
23	8.8	12	35	41	53	80	107	120	47	12	5.4	4.7	23
24	8.6	12	28	38	62	87	115	118	44	12	5.9	4.3	24
25	8.1	13	24	37	60	91	121	115	37	11	6.2	3.9	25
26	7.9	13	22	35	78	116	125	112	35	11	6.8	3.8	26
27	7.4	14	21	32	152	104	127	112	35	11	6.6	3.8	27
28	7.6	14	21	32	221 *	100	127	113	32	11	6.4	3.8	28
29	7.6	13	15	32		85	125	111	31	11	5.1	3.9	29
30	7.8	13	18	33		79	121	111	30	11	4.8	3.2	30
31	9.5		16	31		83		110		10	4.1		31
MEAN	8.3	15.0	25.7	45.7	107	88.8	105	117	671.7	16.7	7.3	3.2	MEAN
MAX.	16	38	85	203	296	155	127	130	109	29	12	4.7	MAX.
MIN.	4.8	9.6	12	13	30	64	72	109	30	10	4.0	2.3	MIN.
AC. FT.	512	893	1579	2807	4982	5460	6248	7224	3997	1027	447	189	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	GAGE HT.	MO.	DAY	TIME	MINIMUM DISCHARGE	GAGE HT.	MO.	DAY	TIME	TOTAL ACRE FEET
48.8	553	2.84	2	11	1115	1.6	0.92	9	14	2030	35360

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	DF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 20 44	119 38 20	SE 2 7S 21E	2000	5.00	2-1-63	SEP 61-DATE		1961		0.00	LOCAL

Station located 1.6 miles north of Oakhurst on Highway 41, 500 feet downstream from White Oaks Guest Home. Station located on left bank above concrete weir. Drainage area is 32.5 square miles. Altitude of gage is approximately 2,300 feet, from topographic map. Flow recorded at this station includes water diverted from South Fork Merced River drainage via Big Creek Diversion.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B67300	MIAMI CREEK NEAR OAKHURST

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.4	1.1	1.8 *	3.2	5.3 *	31	18	19 *	7.7	3.4	1.5 *	0.7	1
2	0.4	1.1	1.7	3.3 *	5.2	25	17 *	20	7.9	3.3 *	1.5	0.7	2
3	0.5	1.1	1.8	3.2	5.4	22	16	20	7.5	3.2	1.4	0.6	3
4	0.5	2.5	4.8	2.7	10	21	17	20	7.0	3.1	1.4	0.6 *	4
5	0.7	2.5	3.2	2.8	8.1	19	17	18	6.6	3.0	1.3	0.6	5
6	0.6 *	1.6 *	2.6	2.9	14	20	19	17	6.4	2.9	1.5	0.6	6
7	0.5	1.8	3.1	2.8	33	19	20	18	6.2 *	2.9	1.5	0.7	7
8	0.6	2.8	2.9	3.8	20	19	21	18	5.8	2.8	1.5	0.6	8
9	0.6	1.9	3.0	7.3	14	18	21	18	5.8	2.8	1.5	0.6	9
10	1.1	1.7	2.8	6.1	61	19	21	18	5.6	2.7	1.4	0.6	10
11	1.1	3.8	2.5	5.2	88	38	22	18	5.4	2.5	1.4	1.0	11
12	0.9	2.7	2.3	7.7	38	24	23	17	5.4	2.5	1.3	1.0	12
13	0.8	2.2	2.4	6.6	29	21	23	17	5.4	2.4	1.3	1.0	13
14	0.8	9.4	1.7	5.8	26	18	20	16	5.5	2.4	1.3	1.0	14
15	0.9	6.5	2.3	5.2	21	17	19	15	5.6	2.4	1.2	0.6	15
16	0.9	7.7	2.7	91	18	16	18	15	5.4	2.4	1.2	0.6	16
17	1.1	4.3	17	45	17	16	19	14	5.4	2.4	1.2	0.6	17
18	1.0	3.3	11	33	16	15	19	13	5.2	2.3	1.1	0.7	18
19	1.0	2.9	10	27	16	15 *	18	13	5.0	2.3	1.1	0.7	19
20	1.3	2.8	7.9	15	16	23	17	12	4.6	2.3	1.0	0.7	20
21	1.2	2.5	6.3	12	15	18	17	11	4.4	2.3	1.0	0.8	21
22	1.1	2.3	6.8	9.5	14	16	18	11	4.2	2.3	1.0	0.9	22
23	1.0	2.1	6.6	8.2	13	16	19	10	4.1	2.3	0.9	1.0	23
24	1.0	2.1	5.2	7.5	17	18	21	9.8	4.1	2.1	0.9	1.0	24
25	1.0	2.0	4.5	7.0	16	21	23	9.8	4.0	1.9	0.9	1.0	25
26	0.9	1.9	4.1	6.6	21	30	24	9.4	3.9	1.9	0.9	1.0	26
27	0.9	2.0	3.9	6.1	38	25	24	9.0	3.9	1.7	0.8	0.9	27
28	1.0	2.0	4.0	5.9	54	23	24	8.4	3.6	1.7	0.8	0.8	28
29	1.0	1.9	3.6	5.8		20	23	7.9	3.4	1.6	0.8	0.8	29
30	1.0	1.8	3.5	6.0		19	21	7.6	3.3	1.6	0.8	0.8	30
31	1.1		3.5	5.6		19		7.7		1.5	0.8		31
MEAN	0.9	2.8	4.5	11.6	23.2	20.7	20.0	14.1	5.8	2.4	1.2	0.8	MEAN
MAX.	1.3	9.4	17	91	88	38	24	20	7.9	3.4	1.5	1.0	MAX.
MIN.	0.4	1.1	1.7	2.7	5.2	15	16	7.6	3.3	1.5	0.8	0.6	MIN.
AC. FT.	53	167	277	714	1287	1271	1188	868	314	149	72	46	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
8.8	239	5.72	1	16	1800	0.3	2.40	10	1	0000	6405

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T & R M.D.B.&M.	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 23 38	119 39 10	SE22 6S 21E	804	9.08	2-1-63	DEC 59-DATE		1959		0.00	LOCAL

Station located 150 feet downstream from bridge, 4.5 miles north of Oakhurst. Tributary to Fresno River. Stage-discharge relationship at times affected by ice. Drainage area is 10.6 square miles. Recorder installed December 15, 1959. Altitude of gage is approximately 3,500 feet (from topographic map).

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B67285	MIAMI CREEK AT HIGHWAY 49 NEAR AHWAHNEE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0	2.0 *	2.3	9.9 *	69	52	31 *	15	1.6	*		1
2		0.0	2.4	2.5 *	11	58	48 *	31	15	2.6 *			2
3		0.0	4.7	3.4	13	57	44	31	14	0.0			3
4		0.0	4.7	2.5	23	67	43	31	12	0.0		*	4
5		0.0	4.3	2.8	23	53	43	29	11	0.0			5
6	*	0.0 *	5.3	3.9	31	63	43	27	9.8	0.0			6
7		0.0	6.3	4.0	74	64	44	28	7.6 *	0.0			7
8		0.0	5.3	5.1	58	64	43	25	6.5	0.0			8
9		0.0	5.9	12	41	54	43	29	5.6	0.0			9
10		0.0	6.5	12	151 *	51	43	26	5.3	0.0			10
11		0.4	7.5	9.2 *	357	117	43	28	5.5	0.0			11
12	N	1.1	8.1	16	189	63	44	28	5.3	0.0	N	N	12
13	O	1.8 *	8.8	18	95	56	44	30	5.7	0.0	O	O	12
14		8.6	10	20	86	48 *	44	27 *	6.0	0.0		*	14
15		8.3	11	26	69	44	40	23	6.0	0.0			15
	F										F	F	
16	L	11 *	10	152	56	42	38	25	6.0	0.0	L	L	16
17	O	6.7	25	103 *	50	42	37 *	26	5.9	0.0 *	O	O	17
18	W	5.3	23 *	59	47	41	36	25	5.3	0.0	W	W	18
19		4.0	16	54	44	40	35	26	4.8 *	0.0			19
20		5.1	14	25	42	116	32	25	4.6	0.0			20
21		4.6	10	15	41	67	30	24	4.4	0.0			21
22		4.6	9.4	7.4	38	65	31	23	3.9	0.0			22
23		4.5	9.8	2.1	38	53	33	21	3.3	0.0			23
24		3.4	7.9	1.0	44	53	35	20	3.4	0.0			24
25		3.0	7.2	11	43	55	36	21	3.5	0.0			25
26		2.8	6.3	15	55	94	38	20	4.2	0.0			26
27		3.7	5.5	16	94	72	39	17	4.0	0.0			27
28		3.4	5.5	14	133 *	68	38	17	4.1	0.0			28
29		2.7	4.6	14		59	37	15	3.4	0.0			29
30		2.3	3.7	16		54	35	15	3.1	0.0			30
31			3.0	12		59		15		0.0			31
MEAN		2.9	8.2	21.2	69.9	61.6	40.0	24.5	6.5	.14			MEAN
MAX.		11	25	152	357	117	52	31	15	2.6			MAX.
MIN.		0.0	2.0	1.0	9.9	40	30	15	3.1	0.0			MIN.
AC. FT.		173	503	1302	3879	3784	2362	1505	385	8.3			AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
19.2	657	7.03	2	11	1145	0.0	0.40	10	1	0000	1390

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 20 50	119 43 00	SW 6 7S 21E	913E	8.24	1-16-70	OCT 69-DATE		1969		0.00	LOCAL

Station located 4.0 miles west of Oakhurst on State Highway 49. Recorder installed on the downstream side of bridge. Tributary to Fresno River. Drainage area 31.6 square miles. Recorder installed 10-15-69. Altitude of gage is approximately 2030 feet (from topographic map).

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B06725	FRESNO RIVER EIGHT MILES WEST OF MADERA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0.0	5.6	55	560	440	5.0					1
2			0.0	5.6	15	470	395	6.0					2
2			0.0	5.6	4.3	390	265	10					3
4			0.0	4.5	3.6	440	255	10					4
5			0.0	3.6	27	460	235	10					5
6			0.0	3.3	79	370	235	11					6
7			0.0	1.7	112	420	235	15					7
8			0.0	0.2	285	435	225	15					8
9			0.0	1.3	210	405	215	10					9
10			0.0	39	164	350	195	8.0					10
11	N	N	0.0	74	2300	520	170	7.0	N	N	N	N	11
12	O	O	0.0	62	4610	755	155	7.0	O	O	O	O	12
13			0.0	60	2490	500	156	8.0					13
14	F	F	0.0	60	900	390	160	7.0	F	F	F	F	14
15	L	L	0.0	56	970	360	175	6.0	L	L	L	L	15
	O	O							O	O	O	O	
16	W	W	0.0	60	600	335	100	5.0	W	W	W	W	16
17			0.0	351	470	335	90	4.0					17
18			0.0	430	390	320	70	4.0					18
19			0.0	300	340	315	50	4.0					19
20			0.0	270	310	615	47	4.0					20
21			0.0	166	270	1150	41	4.0					21
22			0.0	126	255	770	40	4.0					22
23			0.0	112	235	640	38	0.0					23
24			0.0	89	215	530	35	0.0					24
25			0.0	87	240	480	20	0.0					25
26			0.0	80	220	650	10	0.0					26
27			0.0	66	255	720	0.0	0.0					27
28			0.8	66	530	595	0.0	0.0					28
29			5.3	61		585	0.0	0.0					29
30			6.0	60		500	0.0	0.0					30
31			6.7	55		440		0.0					31
MEAN			.60	89	591	510	135	5.3					MEAN
MAX.			6.7	351	4610	1150	440	15					MAX.
MIN.			0.0	0.2	3.6	315	0.0	0.0					MIN.
AC. FT.			37	5477	32840	31350	8047	325					AC. FT.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# – E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
214	6015	10.05	2	11	1130	0		10	1	0015	78080

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T & R M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 58 30	120 12 12	NE15 11S 16E				1936-SEP 40 OCT 41-SEP 42 JUL 44-DATE		1936		0.00	LOCAL

Station located left bank 100 feet downstream from County Road 19 bridge. Equipped with Stevens Type F recorder. Station records natural runoff as well as Central Valley Project water. Records furnished by Madera Irrigation District.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B64300	WEST FORK CHOWCHILLA NEAR MARIPOSA

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0	0.3 *	1.7	7.9	84	56	15	4.1	0.3			1
2		0.0 *	0.3	1.6	7.3	62	51	14	4.4	0.3			2
3		0.0	0.4	1.7 *	7.1	78	47 *	14	3.9	0.2 *			3
4		0.0	1.3	1.5	25	126	44	14 *	3.3 *	0.2		*	4
5	*	0.0	1.5	1.4	17 *	68	42	14	3.1	0.1			5
6		0.0	1.4	1.3	43	110	40	14	2.5	0.1			6
7		0.0	1.6	1.2	71	97	39	13	2.1	0.0			7
8		0.0	1.6	1.8	34	88	36	12	1.9	0.0	*		8
9		0.0	1.2	29	25 *	68	34	12	1.7	0.0			9
10		0.0	1.0	26	369	63	33	11	1.4	0.0			10
11		0.0	0.9	9.9	1100	145	31	10	1.4	0.0			11
12		0.0	0.8	17	397	83	30	9.8	1.3	0.0			12
13	N	0.0	0.8	10	173	65	32	9.0	1.3	0.0	N	N	13
14	O	0.9	0.8	6.8	237	52	36	8.5	1.4	0.0	O	O	14
15		1.8	0.8	5.6	149	46	31	8.8	1.5	0.0			15
16	F	6.1 *	0.9	527	95	43	30	8.0	1.4	0.0	F	F	16
17	L	2.9	46	137 *	69	42	28	7.5	1.3	0.0 *	L	L	17
18	O	1.3	23 *	92	53	40	26	6.6	1.2	0.0	O	O *	18
19	W *	0.8	9.2	61	43	40	25	6.1	1.1 *	0.0	W	W	19
20		0.5	6.7	28	38	242	25	5.9	1.0	0.0			20
21		0.4	4.3	24	35	144	25	5.8	0.8	0.0			31
22		0.4	3.6	17	31	125	25	5.6	0.7	0.0			22
23		0.4	3.5	14	29	82	24	5.3	0.7	0.0			23
24		0.3	3.1	12	46	71	19	5.7	0.7	0.0			24
25		0.3	2.6	11	35	84	19	6.1	0.6	0.0			25
26		0.3	2.3	10	49	193	18	5.6	0.6	0.0			36
27		0.3	2.1	8.9	194	115	17	4.9	0.5	0.0			27
28		0.3	2.2	7.9	250	91	16	4.6	0.5	0.0			28
29		0.3	2.0	8.7		72	16	4.2	0.4	0.0			29
20		0.3	1.8	11		62	16	3.8	0.3	0.0			30
21			1.7	9.5		65		4.0		0.0			31
MEAN	0.0	0.6	4.2	35.3	130	88.6	30.4	8.7	1.6	0.0	0.0	0.0	MEAN
MAX.	0.0	6.1	46	527	1100	242	56	15	4.4	0.3	0.0	0.0	MAX.
MIN.	0.0	0.0	0.3	1.2	7.1	40	16	3.8	0.3	0.0	0.0	0.0	MIN.
AC. FT.	0	35	257	2173	7199	5447	1807	533	93	2	0	0	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
24.2	2540	7.77	1	16	1615	0.0	1.27	10	1	0000	17550

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 25 14	119 52 25	SE10 6S 19E	4350E	8.93	1-25-69	NOV 57-DATE		1957		0.00	LOCAL

Station located 15 feet downstream from Indian Peak Road Bridge, 6.7 miles southeast of Mariposa. Drainage area is 33.6 square miles. Altitude of gage is 1,680 feet (from topographic map). There are no upstream impairments.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	800435	EASTSIDE BYPASS NEAR EL NIDO

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	2.8		0.0	2.8	21 *	2056 *	1824						1
2	6.9 *		0.0	2.4	17	1276	1912 *						2
3	4.1		0.0	1.8	13	680	1437						3
4	9.7		0.0	1.3 *	10	565	1048						4
5	12.		0.0	1.4	7.4	940	1118						5
6	10		0.0	1.1	7.2	1020	1290						6
7	12		0.0	.8	5.1	934	1048						7
8	11		0.0	1.2	4.1	1178	877						8
9	14		0.0	2.0	196	832	788						9
10	12		0.0	1.7	155	742	671						10
11	4.3	N	42	1.8 *	362	629	401	N	N	N	N	N	11
12	0.6	O	148	4.5	3751 *	885	254	O	O	O	O	O	12
13	0.0		153 *	9.4	3247	1147	143						13
14	0.0		171	19	2616	742	78						14
15	0.0	F	140 *	132	1824 *	546 *	84	F	F	F	F	F	15
		L						L	L	L	L	L	
16	0.0	O	110	198	2265	430	108 *	O	O	O	O	O	16
17	0.0	W	83	231	3098	288	80	W	W	W	W	W	17
18	0.0		53	910 *	3581	315	45						18
19	0.0		41 *	728 *	3854	304	43						19
20	0.0		32	684	3833	301	40						20
21	0.0		27	593	3421	944	25						21
22	0.0		22	395	2383	1601	8.5						22
23	0.0		18	301 *	910	1336	0.0						23
24	0.0		13	171	194	939	0.0						24
25	0.0		13	98	273	693	0.0						25
26	0.0		10	64	325	593	0.0						26
27	0.0		8.5	54	309	1042	0.0						27
28	0.0		6.7	40	593	1026	0.0						28
29	0.0		6.4	32		928	0.0						29
30	0.0		5.3	54		1336	0.0						30
31	0.0		3.9	35		1479							31
MEAN	3.2		35.7	154	1331	901	444						MEAN
MAX.	14		171	910	3854	2056	1912						MAX.
MIN.	0.0		0.0	0.8	4.1	288	0.0						MIN.
AC. FT.	197		2195	9464	73930	55390	26420						AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
232	5240	14.60	2	12	0930	0					167600

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.O.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 08 52	120 36 17	SE13 9S 12E	21700	17.58	2-25-69	DEC 64-DATE		1964		90.00	USGS

Station located on left bank 2.8 miles below Washington Road and 6.4 miles west of El Nido. This station is equipped with a radio telemeter. Flows regulated above station. Station records flows from San Joaquin, Fresno, Chowchilla Rivers and Kings River water via James Bypass.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B62400	MARIPOSA CREEK NEAR CATHEYS VALLEY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0	1.7 *	5.9	15	178	79	15	3.5	0.5			1
2		0.0	1.7	5.7	14	122	74	14	3.7	0.5			2
3		0.0	1.9	5.7 *	14	128	67 *	14	3.4	0.5 *			2
4		0.0	3.9	5.4	25	239	56	13 *	3.1 *	0.4		*	4
3		0.0	4.4	5.1	21 *	139	54	13	2.9	0.4			3
6		0.0	4.5	5.0	97	282	52	13	2.6	0.4			6
7		0.0	8.1	4.9	163	327	48	12	2.4	0.3			7
8		0.0	9.2	6.2	78	254	44	11	2.1	0.3	*		8
9		0.0	7.4	153	54 *	179	41	11	1.9	0.3			9
10		0.0	6.4	161	491 *	140	39	10	1.8	0.3			10
11		0.0	5.5	58	2550	279	36	9.5	1.7	0.2			11
12	N	0.0	5.2	201	787	171	34	9.1	1.5	0.2	N	N	13
13	O	0.0	4.9	75	317	132	34	8.5	1.5	0.2	O	O	12
14		38	4.7	44	376	104	39	8.2	1.5	0.1			14
13	F	37	5.0	32	288	83	32	7.8	1.5	0.1	F	F	15
	L										L	L	
16	O	63 *	5.4	1040	171	70	30	7.2	1.4	0.0	O	O	16
17	W	29	216	438 *	122	62	29	6.7	1.3	0.0	W	W	17
18		11	95 *	220	93	55	27	6.3	1.2	0.0			18
19		6.4	51	176	73	51	25	5.9	1.0 *	0.0			19
20		4.8	33	90	60	454	23	5.5	0.9	0.0			20
21		4.0	21	63	53	302	22	5.3	0.9	0.0			21
22		3.5	17	46	45	331	21	5.2	0.8	0.0			22
23		3.1	14	35	39	220	21	5.0	0.7	0.0			23
24		2.8	12	29	63	169	21	4.8	0.7	0.0			24
25		2.5	10	26	52	136	19	5.1	0.8	0.0			25
26		2.3	9.0	23	76	285	18	4.7	0.8	0.0			26
27		2.2	8.4	19	278 *	174	17	4.4	0.7	0.0			27
28		2.0	8.0	17	481	139	16	4.2	0.7	0.0			28
39		1.9	7.2	17		114	16	3.8	0.6	0.0			29
30		1.8	6.5	19		99	16	3.6	0.6	0.0			30
31			6.1	16		98		3.6		0.0			31
MEAN		7.2	19.2	98.1	246	178	35.0	8.1	1.6	0.2			MEAN
MAX.		63	210	1040	2550	454	79	15	3.7	0.5			MAX.
MIN.		0.0	1.7	4.9	14	51	16	3.6	0.6	0.0			MIN.
AC. FT.		427	1178	6034	13680	10940	2083	497	96	9			AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
48.3	5140	10.27	2	11	1100	0.0	1.30	10	1	0000	34940

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.O.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO OH GAGE	REF. DATUM
37 23 55	120 00 10	NE21 6S 18E	7460E	11.63	2-24-69	NOV 57-DATE		1957		0.00	LOCAL

Station located at county road bridge, 5.6 miles east of Catheys Valley School. Tributary to San Joaquin River via Eastside Bypass. Drainage area is 65.7 square miles. Maximum discharge of record from rating curve extended above 4,705 cfs. Altitude of gage is 1,230 feet (from topographic map). There are no upstream impairments.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B62100	MARIPOSA CREEK BELOW MARIPOSA RESERVOIR

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0	2.7	8.0	20	360	137	25	3.9				1
2		0.0	2.5	7.8	17	224	110	24	3.8				2
3		0.0	2.1	7.6	16	140	102	22	3.7				3
4		0.0	2.2	7.4	17	229	94	21	3.6				4
5		0.0	2.1	7.2	23	214	84	21	3.5				5
6		0.0	2.4	6.8	30	250	82	20	3.4				6
7		0.0	2.9	6.8	152	480	78	20	3.2				7
8		0.0	7.0	6.6	161	435	74	19	3.1				8
9		0.0	10	9.1	84	346	70	17	3.1				9
10		0.0	10	176	229	242	68	15	2.8				10
11	N	0.0	8.8	110	743	286	56	14	2.7	N	N	N	11
12	O	0.0	7.4	126	906	294	54	14	2.5	O	O	O	12
13		0.0	7.0	152	888	207	66	13	2.5				13
14		0.0	6.6	72	840	161	72	12	2.5				14
15	F	0.0	6.4	42	821	128	64	12	2.5	F	F	F	15
	L									L	L	L	
16	O	0.0	6.2	204	765	106	58	11	2.4	O	O	O	16
17	W	0.0	11	682	675	90	52	9.6	2.3	W	W	W	17
18		0.0	212	615	538	84	50	9.2	2.2				18
19		3.0	92	480	320	74	47	8.0	2.2				19
20		5.0	62	260	128	360	45	7.6	2.1				20
21		4.6	39	106	84	490	43	7.4	2.0				21
22		4.2	25	74	70	455	41	7.2	1.9				22
23		4.0	21	49	54	385	40	6.8	1.7				23
24		3.7	18	40	52	298	38	6.2	1.6				24
25		3.4	15	34	80	210	36	5.8	1.4				25
26		3.3	14	31	375	318	34	5.2	1.2				26
27		3.2	13	26	114	322	31	5.2	1.1				27
28		3.0	12	24	399	249	28	5.0	0.8				28
29		2.9	10	21		194	27	4.4	0.2				29
30		2.7	9.6	21		164	26	4.0	0.0				30
21			8.8	21		149		4.0					31
MEAN		1.4	20.9	110.8	307.2	256.3	60.2	12.1	2.3				MEAN
MAX.		5.0	212	682	906	490	137	25	3.9				MAX.
MIN.		0.0	2.1	6.6	16	74	26	4.0	0.0				MIN.
AC. FT.		85	1287	6810	17060	15757	3584	745	139				AC.FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
62.8	951		2	12		0.0		10	1		45466

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 16 52	120 09 45	NE 36 7S 16E	6020		12-24-55	NOV 52-DATE		1952		337.63	USCGS

Station located 1.5 miles downstream from Mariposa Dam. Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Mariposa Reservoir since 1948. Records furnished by U. S. Corps of Engineers. Drainage area is 110 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B06170	OWENS CREEK BELOW OWENS RESERVOIR

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0	0.5	1.0	2.0	22	23	6.3	2.0	1.0	1.0	1.0	1
2		0.0	0.5	1.0	2.0	17	20	6.0	2.0	1.0	1.0	1.0	2
3		0.0	0.5	1.0	2.0	18	18	5.7	2.0	1.0	1.0	1.0	3
4		0.0	0.5	1.0	2.0	46	16	5.4	2.0	1.0	1.0	1.0	4
5		0.0	1.0	1.0	2.0	24	15	5.4	2.0	1.0	1.0	1.0	5
6		0.0	1.0	1.0	11	32	14	5.4	2.0	1.0	1.0	1.0	6
7		0.0	3.0	1.0	17	73	14	5.1	2.0	1.0	1.0	1.0	7
8		0.0	3.3	2.0	7.8	81	13	4.8	2.0	1.0	1.0	1.0	8
9		0.0	2.0	2.0	6.0	68	12	4.8	2.0	1.0	1.0	1.0	9
10		0.0	2.0	2.0	30	35	12	4.2	2.0	1.0	1.0	1.0	10
11	N	0.0	1.0	2.0	100	61	12	3.0	2.0	1.0	1.0	1.0	11
12	O	0.0	1.0	2.0	130	35	11	3.0	2.0	1.0	1.0	1.0	12
13		0.0	1.0	2.0	130	28	12	3.0	2.0	1.0	1.0	1.0	13
14		4.0	1.0	2.0	126	24	18	3.0	2.0	1.0	1.0	1.0	14
15	F	3.2	1.0	2.0	124	21	12	3.0	2.0	1.0	1.0	1.0	15
16	L O	5.9	1.0	2.0	116	18	11	3.0	2.0	1.0	1.0	1.0	16
17	W	5.6	13	2.0	108	17	11	3.0	2.0	1.0	1.0	1.0	17
18		2.0	15	2.0	97	16	10	2.0	2.0	1.0	1.0	1.0	18
19		1.0	8.4	2.0	79	16	9.6	2.0	2.0	1.0	1.0	1.0	19
20		0.5	5.7	2.0	26	88	9.3	2.0	2.0	1.0	1.0	1.0	20
21		0.5	3.0	2.0	17	89	9.0	2.0	2.0	1.0	1.0	1.0	21
22		0.5	3.0	2.0	14	84	8.7	2.0	1.0	1.0	1.0	1.0	22
23		0.5	3.0	2.0	13	66	8.1	2.0	1.0	1.0	1.0	1.0	23
24		0.5	2.0	2.0	16	33	7.8	2.0	1.0	1.0	1.0	1.0	24
25		0.5	2.0	2.0	15	29	8.1	2.0	1.0	1.0	1.0	1.0	25
26		0.5	2.0	2.0	16	74	7.8	2.0	2.0	1.0	1.0	1.0	26
27		0.5	2.0	2.0	21	62	7.5	2.0	1.0	1.0	1.0	1.0	27
28		0.5	2.0	2.0	48	36	7.2	2.0	1.0	1.0	1.0	1.0	28
29		0.5	2.0	2.0		29	6.9	2.0	1.0	1.0	1.0	1.0	29
30		0.5	1.0	2.0		26	6.6	2.0	1.0	1.0	1.0	1.0	30
31			1.0	2.0		27		2.0		1.0	1.0		31
MEAN		0.9	2.8	1.8	45.6	41.8	11.7	3.3	1.7	1.0	1.0	1.0	MEAN
MAX.		5.9	15	2.0	130	89	23	6.3	2.0	1.0	1.0	1.0	MAX.
MIN.		0.0	0.5	1.0	2.0	16	6.6	2.0	1.0	1.0	1.0	1.0	MIN.
AC. FT.		54	169	109	2534	2569	695	203	103	62	62	60	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
9.1	130		2	11		0		10	1		6619

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 18 28	120 11 35	SW 23 7S 16E	590		12-24-55	FEB 50-DATE		1950		338.22	USCGS

Station located 0.25 mile downstream from Owens Dam. Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Owens Reservoir since 1949. Records furnished by U. S. Corps of Engineers. Drainage area is 25.6 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B05570	BEAR CREEK BELOW BEAR RESERVOIR

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0	1.9	7.0	14	109	90	37	7.0	1.3			1
2		0.0	2.0	6.6	13	78	76	34	7.0	1.3			2
2		0.0	1.9	6.2	12	64	68	33	6.6	1.3			3
4		0.0	2.6	6.2	13	182	63	32	6.2	1.3			4
5		0.0	2.6	5.8	15	119	60	31	5.4	1.3			5
6		0.0	4.1	5.4	21	106	58	30	5.0	1.3			6
7		0.0	5.0	5.0	157	406	57	29	4.1	1.3			7
8		0.0	8.2	5.0	82	288	56	28	3.8	1.2			8
9		0.0	15	6.6	54	191	54	27	2.9	1.0			9
10		0.0	15	11	342	127	56	27	2.3	0.8			10
11	N	0.0	12	63	1208	312	57	24	2.0	0.7	N	N	11
12	O	0.0	9.0	185	1452	173	57	22	1.8	0.7	O	O	12
13		0.0	7.8	105	956	121	54	21	1.7	0.5			13
14	F	0.0	7.0	54	277	96	66	21	1.7	0.2			14
15	L	0.0	5.8	35	300	78	62	17	1.8	0.1	F	F	15
	O										L	L	
16	W	0.0	5.0	323	152	68	57	16	1.7	0.0	O	O	16
17		18	82	1012	105	58	52	15	1.7	0.0	W	W	17
18		30	245	209	84	52	51	14	1.7	0.0			18
19		14	92	284	70	48	48	13	1.5	0.0			19
20		8.2	81	107	57	600	45	11	1.5	0.0			20
21		6.2	41	72	48	346	44	11	1.5	0.0			21
22		5.0	28	52	41	418	44	10	1.5	0.0			22
22		3.8	23	39	34	203	44	9.6	1.5	0.0			23
24		3.5	20	30	38	139	44	9.6	1.5	0.0			24
25		2.9	17	27	51	111	44	9.0	1.5	0.0			25
26		2.0	13	22	41	222	43	9.0	1.4	0.0			26
27		2.0	11	19	78	165	41	8.6	1.4	0.0			27
28		2.0	10	17	177	139	40	8.2	1.4	0.0			28
29		1.9	9.0	15		107	39	7.8	1.3	0.0			29
30		1.8	8.2	17		94	39	7.0	1.3	0.0			20
21			7.0	17		96		7.0		0.0			31
MEAN		3.4	25.6	89.3	210	171	53.6	18.7	2.7	0.5			MEAN
MAX.		30	245	1012	1452	600	90	37	7.0	1.3			MAX.
MIN.		0.0	1.9	5.0	12	48	39	7.0	1.3	0.0			MIN.
AC. FT.		201	1571	5492	11687	10544	3191	1148	162	28			AC.FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
47.0	1556		2	11		0		10	1		34024

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO OH GAGE	REF. DATUM
37 21 27	120 14 05	NE 5 7S 16E	4460		12-24-55	JAN 55-DATE		1955		320.50	USCGS

Station located approximately 0.75 mile downstream from Bear Dam. Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Bear Reservoir since 1950. Records furnished by U. S. Corps of Engineers. Drainage area is 72.1 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B05525	BEAR CREEK AT MCKEE ROAD NEAR MERCED

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	69	23	19	35	224	633	248	138	154	142	126	122	1
2	69	22	19	33	190	395	214	160	151	130	138	138	2
3	66	20	19	32	170	285	194	144	146	130	134	132	3
4	59	22	20	30	170	370	176	170	158	114	132	154	4
5	71	23	21	30	192	420	138	174	162	152	142	180	5
6	86	21	22	28	196	324	126	166	158	140	166	168	6
7	80	20	28	27	483	1000	116	164	124	138	154	152	7
8	74	20	31	28	350	1409	170	174	101	150	144	130	8
9	74	20	32	47	254	856	305	186	108	160	150	134	9
10	64	22	32	302	618	518	266	194	126	160	134	130	10
11	64	31	32	232	4339	657	216	212	136	160	142	151	11
12	59	37	30	376	4397	530	174	198	140	110	160	150	12
13	51	30	27	382	3176	370	190	190	134	107	162	130	13
14	45	118	26	190	1298	295	170	166	144	122	130	112	14
15	40	272	24	124	1303	250	152	174	140	132	122	101	15
16	38	129	23	1206	668	220	138	174	150	114	130	106	16
17	35	110	64	3288	495	202	158	180	164	116	126	128	17
18	32	72	577	1306	395	186	192	192	170	116	144	136	18
19	30	52	413	1065	332	172	184	188	144	132	142	126	19
20	28	44	345	480	285	1160	172	172	142	156	124	118	20
21	26	35	192	338	256	918	172	164	122	146	124	150	21
22	24	37	122	272	234	882	162	182	114	158	132	142	22
23	23	30	130	236	212	551	180	168	126	160	120	140	23
24	21	27	98	210	196	398	168	144	136	132	146	110	24
25	21	26	78	198	212	322	136	138	140	130	154	104	25
26	20	23	95	240	208	774	150	142	144	108	150	100	36
27	20	22	56	196	279	539	182	154	146	92	168	104	27
28	19	21	53	174	805	422	134	150	124	92	166	98	28
29	19	20	47	208		330	132	142	112	95	140	101	29
30	18	19	42	358		272	122	140	106	106	107	110	30
31	19		38	285		250		138		112	112		31
MEAN	44	46	89	386	783	513	175	167	137	129	139	129	MEAN
MAX.	86	272	577	3288	4397	1409	305	212	170	160	168	180	MAX.
MIN.	18	19	19	27	170	172	116	138	101	92	107	98	MIN.
AC. FT.	2705	2713	5464	23714	43511	31557	10387	10270	8176	7958	8571	7650	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
225	5542	17.35	2	11		18		10	30		162683

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 18 34	120 26 38	SW21 7S 14E	5,542	17.35	2-11-73	NOV 56- DATE		1956		75.00	ASSUMED

Station located 50 feet downstream from McKee Road Bridge, one mile east of Merced. Tributary to San Joaquin River via Eastside Bypass. Flow regulated by Bear and Burns Reservoirs. Records furnished by the U. S. Corps of Engineers. Altitude of gage is 189 feet (from topographic map). Drainage area is 190 square miles. In December 1955, prior to installation of this station, a gage height of 22.9 feet was taken from a high water mark and the discharge was estimated as 9,500 cfs. Station installed in 1956; however, prior to 1969 records were not requested for publication by Department of Water Resources. Prior records available at U. S. Corps of Engineers office, Sacramento.

LE B-3 (Cont.)

MEAN DISCHARGE

BIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B05518	BEAR CREEK AT MERCED IRRIGATION DISTRICT WEST BOUNDARY

OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
79	16	17E	13	130	776	174	111	82	87	68	68	1
101	16	18E	12	83	500	162	124	168	101	83	76	2
70	14	18E	12	62	276	142	130	131	97	78	79	3
51	21	18E	12	55	220	126	126	137	93	67	75	4
44	20	19E	13	69	349	111	117	99	106	65	101	5
77	15	18	13	72	287	72	109	90	117	107	130	6
73	14	17	13	318	457	50	116	100	104	109	119	7
62	19	21	13	360	783	60	110	101	101	83	114	8
54	14	23	NR	177	845	181	96	88	124	99	109	9
42	19	23	NR	352	668	234	110	85	112	119	103	10
37	65	22	286	1325E	484	213	118	106	118	106	112	11
30	45	22E	241	1266E	500	177	125	99	103E	112	97	12
29	27	22E	489	1189E	395	161	114	95	81E	90	67	13
26	81	22E	216	956E	283	184	125	92	77	68	103	14
23	590	22E	106	930	220	147	124	95	101	57	97	15
27	375	22E	213	727	186	139	118	111	89	65	81	16
38	234	248E	1256E	534	164	130	106	127	80	75	111	17
20	117	393E	1239E	357	147	164	103	144	86	97	171	18
99	61	530E	1156E	258	135	164	115	130	81	86	148	19
37	45	588	749	219	181	117	129	110	101	86	153	20
22	34	315	328	185	738	88	145	92	103	65	118	21
20	32	177	194	162	790	85	167	86	127	83	147	22
19	27	155	128	140	760	101	158	89	125	74	186	23
18	21	126	96	124	492	97	136	86	77	78	152	24
17	20	94	78	120	324	87	134	100	99	103	106	25
15	18	69	94	132	318	88	118	86	85	103	96	26
14	15	51	90	158	630	125	114	86	81	112	84	27
14	16	45E	64	545	457	168	103	100	71	122	75	28
13	16	39E	57		489	131	101	88	61	82	77	29
13	16	34E	283		234	119	92	85	72	81	114	30
13		29E	304		163		121		61	82		31
39	67	104	251	393	427	133	120	103	94	87	109	MEAN
101	590	588	1256	1325	845	234	167	168	127	122	186	MAX.
13	14	17	0	55	135	50	92	82	61	57	67	MIN.
2374	4013	6381	15408	21828	26283	7928	7369	6125	5794	5365	6484	AC.FT.

MATED
RECORD
CHARGE MEASUREMENT OR
ERVATION OF NO FLOW
ID *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
159	1325E	9.00	2	11		0	.16	10	29		115400

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
ATITUDE	LONGITUDE	1/4 SEC. T. & R. M.O.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
15 21	120 39 08	NE 9 8S 12E				1930-					

ation located 400 feet downstream from Crane Road Bridge, 6.6 miles southwest of Atwater.

ributary to San Joaquin River via Eastside Bypass. Flow regulated by Bear and Burns Reservoirs.

ecords furnished by Merced Irrigation District. Altitude of gage is 108 feet (from U. S. Geological Survey opographic map). Monthly runoff records dating back to 1947 are published in Bulletin No. 130-69.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B56100	BURNS CREEK BELOW BURNS RESERVOIR

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0	0.0	0.0	3.2	47	20	0.4					1
2		0.0	0.0	0.0	2.2	17	16	0.2					2
3		0.0	0.0	0.0	1.8	15	13	0.1					3
4		0.0	0.0	0.0	8.4	85	10	0.1					4
5		0.0	0.0	0.0	5.5	24	9.5	0.0					5
6		0.0	0.2	0.0	42	106	7.0	0.0					6
7		0.0	0.4	0.0	96	874	6.1	0.0					7
8		0.0	0.0	0.0	23	572	5.2	0.0					8
9		0.0	0.0	27	12	993	4.6	0.0					9
10		0.0	0.0	29	283	1213	4.3	0.0					10
11	N	2.9	0.0	21	1496	504	3.8	0.0	N	N	N	N	11
12	O	0.0	0.0	87	1651	84	3.2	0.0	O	O	O	O	12
13		0.0	0.0	20	625	50	3.0	0.0					13
14	F	62	0.0	7.5	336	37	4.6	0.0	F	F	F	F	14
15	L	22	0.0	4.3	260	22	3.6	0.0	L	L	L	L	15
	O								O	O	O	O	
16	W	6.8	0.0	629	86	17	3.0	0.0	W	W	W	W	16
17		1.1	72	807	47	15	2.4	0.0					17
18		0.0	55	267	31	12	2.2	0.0					18
19		0.0	105	152	26	11	2.0	0.0					19
20		0.0	17	36	18	707	1.8	0.0					20
21		0.0	4.3	23	12	170	1.6	0.0					21
22		0.0	6.8	14	9.0	207	1.5	0.0					22
23		0.0	3.8	7.5	6.7	86	1.4	0.0					23
24		0.0	1.6	5.2	7.0	55	1.4	0.0					24
25		0.0	0.7	9.0	12	42	1.2	0.0					35
26		0.0	0.4	10	31	308	0.8	0.0					26
27		0.0	0.2	4.6	54	100	0.7	0.0					27
28		0.0	0.2	3.2	129	74	0.6	0.0					28
29		0.0	0.0	17		43	0.4	0.0					29
30		0.0	0.0	18		34	0.4	0.0					30
31			0.0	6.7		37		0.0					31
MEAN		3.1	8.6	71.1	190	212	4.5	0.0					MEAN
MAX.		62	105	807	1651	1213	20	0.4					MAX.
MIN.		0.0	0.0	0.0	1.8	11	0.4	0.1					MIN.
AC. FT.		188	531	4374	10540	13014	268	1.6					AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
39.9	1876		2	11		0.0		10	1		28916

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 22 27	120 16 35	NE 36 6S 15E	2590		12-24-55.	APR 50-DATE		1950		260.60	USCGS

Station located 0.5 mile downstream from Burns Dam. Tributary to San Joaquin River via Bear Creek. Flow regulated by Burns Reservoir since 1950. Records furnished by U. S. Corps of Engineers. Drainage area is 73.8 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07400	SAN JOAQUIN RIVER NEAR STEVINSON

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	57	26	48	82	399	2100	2020	54	27	32	24	39	1
2	41	27 *	45	77 *	297 *	2940 *	2130	61	25	28	20 *	38	2
3	37	29	44	70	237	2190	2160 *	77 *	33	25	17	26	3
4	31	29	44 *	65	196	1630	1730	84	58	23	15	21 *	4
5	22 *	29	44	65	179	1540	1430	114	87	22	13	22	5
6	15	30	46	57	192	1920	1420	112	85 *	20	11	27	6
7	15	27	47	60	203	2040	1400	100	51	16	11	47	7
8	16	21	47	77	426	2680	1190	101	33	18	13	131	8
9	17	24	47	100	401	3370	1120	96	26	22 *	16	146	9
10	19	37	47	171	499	2990	1160	89	29	30	16	125	10
11	20	53	47	306 *	1310	2320	994	80	27	32	19	100	11
12	17	91	47	336	4090 *	2010	740	76	27	23	28	106	12
13	15	113	51	442	8200 *	2090	533	73	29	18	37	117	13
14	18	138	85	486	8980	1890	379	72	29	23	57	104	14
15	11	278	133	365	7320	1510	318	70	30	33	48	71	15
16	10	644	151	325	5180	1240	303	76	30	27	37	57	16
17	10	597	129	824	4140	1020	299	81	30	27	30	98	17
18	12	486	127	2470	4030	831	285	80	30	32	22	116	18
19	14	349	396	2640 *	4070	804	305	61	31	31	25	123	19
20	34	255	472	2450 *	4050	813	229	46	32	26	26	103	20
21	51	182	485 *	1970	3840	1390	179	67	31	25	29	119	21
22	36	133	449	1440 *	3400	2590	144	100	30	27	29	125	22
23	20	115	330	1050	2640	2800	132	107	29	26	30	137	23
24	16	99	245	780	1480	2490	118	101	32	24	27	152	24
25	15	69	138	577	877	1950	107	96	32	25	22	157	25
26	15	52	177	448	887	1600	95	101	32	23	20	158	26
27	16	54	148	394	996	1810	74	112	32	28	19	136	27
28	18	50	122	337	1190	2160	57	110	35	28	25	113	28
29	20	47	103	286		1940	57	59	33	38	33	76	29
30	22	46	96	287		1820	64	42	31	40	42	52	30
31	24		89	456		1920		33		35	41		31
MEAN	22.1	138	144	629	2490	1948	706	81.7	35.5	26.7	25.9	94.7	MEAN
MAX.	57	644	485	2640	8980	3370	2160	114	87	40	57	158	MAX.
MIN.	10	21	44	57	179	804	57	33	25	16	11	21	MIN.
AC. FT.	1357	8192	8884	38660	138300	119800	41990	5020	2114	1640	1591	5637	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
515	9980	74.02	2	14	1530	9.6	61.28	10	16	0845	373100

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 17 42	120 50 00	26 7S 10E	26740	76.23	2-26-69	OCT 61-DATE	MAY 61-SEP 61	1961		0.00	USCGS

Station located on bridge 2.3 miles south of Stevinson on Lander Avenue. Flows regulated by upstream reservoirs and diversions. Drainage area is 7,388 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B00975	PANOCHE DRAIN NEAR DOS PALOS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	25	22 *	24 *	18	25 *	34	43	70	80	83	78 *	46	1
2	28 *	21	25	19	25	35	38	70	75	84	79	46	2
3	27	20	30	19	28	42	42	72 *	76	84	80	47	3
4	33	41	31	19 *	25	46	41	74	77	81	78	49 *	4
5	21	37	26	17	24	39	49	75	77 *	81 *	78	49	5
6	19	30	28	18	27	43	38	74	75	82	78	52	6
7	20	32	31	20	26	47	45	72	69	84	78	49	7
8	19	29	24	30	24	49	51	74	72	84	79	48	8
9	23	25	21	32	24	52 *	55	74	73	83	77	47	9
10	24	35	23	28	29	42	56	77	75	84	74	34	10
11	24	60	24	26	70	44	52	77	77	83	79	35	11
12	22	37	25	25	88	40	52	80	78	82	79	38	12
13	20	31	26 *	25	89	34	57	84	78	84	76	32	13
14	23	60	23	26	86	33	57	81	80	85	72	32	14
15	21	78	27	30	80	30 E	60	79	83	82	68	36	15
16	19	76	24	44	75	26 E	60 *	78	83	81	68	37	16
17	18	47	22	51	66	30	58	76	86	81	71	34 *	17
18	18	41	19	39	54	28 E	59	71	86	81	72	31	18
19	18	40	20	39	50	30	62	72	84	80	73	31	19
20	18	40 *	18	29	48	34	66	77	83	80	73	30	20
21	18	32	18	31	45	33	70	78	84	82	72	28	21
22	18	27	18	30	35	29 E	78	78	84	82	70	26	22
23	18	27	18	30 *	33	29 E	77	78	84	82 *	66	25	23
24	18	25	18	30	31	29 E	75	79	83	81	69	22	24
25	18	26	18	29	30	32	70	80	84	79	72	27	25
26	18	23	18	31	35	31	59	81	84	78	73	26	26
27	18	24	19	28	36	29 E	64	77	85	77	63	27	27
28	17	22	20	25	45	31	66	76	84	77	49	27	28
29	17	22	19	27		35	70	75	83	77	38	27	29
30	17	23	17	33		41 *	71	76	81	81	37	20	30
31	19		18	27		45		81		78	38		31
MEAN	20.5	35.1	22.3	28.1	44.8	36.2	58.0	76.3	80.1	81.4	69.6	35.3	MEAN
MAX.	33	78	31	51	89	52	78	84	86	85	80	52	MAX.
MIN.	17	20	17	17	24	26	38	70	69	77	37	20	MIN.
AC. FT.	1261	2089	1373	1728	2490	2225	3436	4693	4766	5004	4278	2099	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
48.8	89	9.25	2	13	0600	16	1.87	12	30	2100	35460

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
36 55 25	120 41 19	NW 5 12S 12E	69. 89.[a]	9.19 9.25	11-24-65 2-13-73	FEB 59-SEP 62 OCT 64-SEP 68 APR 69-DATE	OCT 62-JUL 63	1959		-2.00	LOCAL

Station located midway between Outside and Main Canals 0.5 mile south of Main Canal levee road, 5.6 miles southwest of Dos Palos. This is drainage returned to San Joaquin River. Station is operated under a cooperative agreement between the Department of Water Resources and the Panoche Drainage District. Altitude of gage is approximately 140 feet (from U. S. Geological Survey topographic map).

a In April 1969, the gage height-discharge relationship was changed by removing the control boards from the entrance to the culvert increasing its capacity.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B00470	SALT SLOUGH NEAR STEVINSON

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	54	81	214 *	57	248	335	245	245	97	118	125	162	1
2	68	91 *	209	55 *	243 *	375	251	262	126	130	120 *	174	2
3	40	74	192	54	243	361	261	262 *	122	129	124	177	3
4	27	83	167	48	242	322	257	237	124	151	133	167 *	4
5	20 *	89	172	48	240	298	230	219	109	146	105	134	5
6	20	66	169	52	247	307	241	233	94 *	125	107	104	6
7	17	60	161	55	247	360 *	249	246	99	121	104	100	7
8	22	63	151	75	240	414	245	214	92	115	110	127	8
9	17	65	148	91	230	460	264	174	92	128 *	110	142	9
10	27	66	138	103	233	456	285	162	82	136	101	135	10
11	31	78	117	111	233	411	302	169	87	130	109	130	11
12	32	95	105	120	261	371	304 *	167	115	106	136	105	12
13	38	96	95	130	414 *	348	310	162	115	105	165	85	13
14	39	122	90	136	507	328	330	172	115	100	171	81	14
15	49	191	96	136	507	297	339	184	92	96	122	113	15
16	49	303	92	155	438	273	364	181	119	107	103	138	16
17	52	331	102	188	403	255	373	153	128	118	105	161	17
18	56	303	114	222	397	246	314	135	129	125	107	173	18
19	55	282	118	278	414	240	312	118	157	116	105	163	19
20	53	271	120	295	433	249	328	113	173	129	100	138	20
21	57	268	118	279	447	258	322	132	161	184	102	132	21
22	50	264	117	270	447	295	312	105	149	168	111	172	22
23	39	256	119	256	426	329	331	113	122	138	126	178	23
24	31	251	118	254	375	319	334	109	131	122	129	165	24
25	30	247	115	238	325	290	307	97	141	148	141	142	25
26	23	241	114	239	310	262	270	91	139	131	152	142	26
27	20	237	98	258	308	259	246	94	132	108	144	157	27
28	35	231	76	261	322	272	264	125	127	83	149	147	28
29	50	226	67	257		262	266	102	133	110	143	153	29
30	62	213	64	256		246	250	114	118	152	153	158	30
31	68		65	253		249		96		147	146		31
MEAN	39.7	175	124	169	335	314	290	161	121	127	124	142	MEAN
MAX.	68	331	214	295	507	460	373	262	173	184	171	178	MAX.
MIN.	17	60	64	48	230	240	230	91	82	83	100	81	MIN.
AC. FT.	2442	10400	7619	10370	18600	19330	17270	9890	7180	7783	7652	8440	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
175	537	69.62	2	14	2400	16	63.39	10	7	1015	127000

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T & R M.D B &M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 14 52	120 51 04	SE10 8S 10E	537	70.35a 69.62	6-10-69 2-14-73	MAR 68-DATE		1968		0.00	USCGS

Station located at Lander Avenue bridge, 5.5 miles south of Stevinson. This includes drainage being returned to San Joaquin River. Drainage area is 227 square miles.

a This maximum gage height of record was affected by backwater and does not represent the maximum discharge.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B52580	BEAN CREEK NEAR COULTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.1	0.1 *	0.1	0.6	2.8	16	11	2.3	1.5 *	0.4	0.2	0.1	1
2	0.1 *	0.0	0.1	0.6	2.5 *	12	9.2	2.2	1.3	0.4	0.2	0.1	2
3	0.0	0.1	0.2	0.6 *	2.9	16	7.6	2.2 *	1.1	0.3	0.2	0.1	3
4	0.0	0.3	0.3 *	0.6	7.8	27	7.0 *	2.3	0.9	0.3	0.2	0.1	4
5	0.0	0.4	0.2	0.6	2.0	12	6.5	2.3	0.8	0.3	0.2	0.1 *	5
6	0.0	0.4	0.2	0.6	19	26	6.0	2.1	0.7	0.3 *	0.2 *	0.1	6
7	0.0	0.6	0.2	0.6	21	23	5.6	2.0	0.7	0.3	0.2	0.1	7
8	0.1	0.7	0.2	0.8	8.9	19	5.1	2.0	0.7	0.3	0.2	0.1	8
9	0.2	0.7	0.3	9.4	10	16	4.9	1.9	0.7	0.3	0.2	0.1	9
10	0.4	0.7	0.3	7.2	82	15	4.8	1.7	0.6	0.3	0.2	0.1	10
11	0.4	1.1	0.4	5.2	227	29	4.5	1.7	0.6	0.3	0.2	0.1	11
12	0.4	0.7	0.5	57	107	16	4.3	1.6	0.6	0.3	0.1	0.1	12
13	0.5	0.9	0.7	12	39	14	5.1	1.5	0.6	0.3	0.1	0.1	13
14	0.5	3.4	1.0	7.5	46	12	5.1	1.5	0.6	0.3	0.1	0.1	14
15	0.5	1.2	0.4	7.7	37	8.5	4.5	1.4	0.6	0.3	0.1	0.1	15
16	0.6	0.7	0.2	55	20	8.2	4.2	1.3	0.6	0.3	0.1	0.1	16
17	0.6	0.4	10	36	13	7.7	4.0	1.3	0.6	0.3	0.1	0.1	17
18	0.5	0.3	3.8	26	12	7.1	3.9	1.3	0.6	0.3	0.1	0.1	18
19	0.5	0.2	2.5	18	9.8	8.0	3.8	1.2	0.6	0.3	0.1	0.1	19
20	0.5	0.2	1.1	11	8.6	23	3.6	1.2	0.5	0.3	0.1	0.1	20
21	0.4	0.2	0.8	8.4	7.9	15	3.4	1.3	0.5	0.3	0.1	0.1	21
22	0.3	0.2	1.1	6.4	6.9	15	3.3	1.2	0.5	0.3	0.1	0.1	22
23	0.3	0.2	0.8	5.2	6.5	21	3.2	1.1	0.5	0.2	0.2	0.1	23
24	0.3	0.2	0.8	4.8	13	24	3.1	1.1	0.5	0.2	0.2	0.1	24
25	0.2	0.2	0.7	4.6	6.0	23	2.9	1.2	0.5	0.2	0.2	0.1	25
26	0.2	0.2	0.7	4.3	26	33	2.8	1.1	0.5	0.2	0.2	0.1	26
27	0.2	0.2	0.6	3.8	27 *	21	2.7	1.0	0.4	0.2	0.1	0.1	27
28	0.2	0.2	0.7	2.9	33	19	2.6	1.0	0.4	0.2	0.2	0.1	28
29	0.2	0.1	0.6	4.1		13	2.6	0.9	0.4	0.2	0.1	0.1	29
30	0.1	0.1	0.6	3.1		13	2.5	0.9	0.4	0.2	0.1	0.1	30
31	0.1		0.6	2.8		14		1.0		0.2	0.1		31
MEAN	0.3	0.5	1.0	9.9	28.7	17.0	4.7	1.5	0.6	0.3	0.2	0.1	MEAN
MAX.	0.6	3.4	10	55	227	33	11	2.3	1.5	0.4	0.2	0.1	MAX.
MIN.	0.0	0.0	0.1	0.6	2.0	7.1	2.5	0.9	0.4	0.2	0.1	0.1	MIN.
AC. FT.	17	30	61	610	1596	1044	277	93	39	17	9	6	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
5.25	394	5.51	2	11	0715	0.0	1.14	10	3	0000	3798

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B. &M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 44 29	120 07 00	SE20 2S 17E	1090	8.13	1-21-69	DEC 65-DATE		1965		0.00	LOCAL

Station located on right bank 0.8 mile east of Greeley Hill and 4.8 miles northeast of Coulterville. Maximum discharge of record from rating curve extended above 758 cfs. There are no upstream impairments. Drainage area is 7.4 square miles.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B51250	MAXWELL CREEK AT COULTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		0.0 *	0.1	1.4	5.2	32	31	4.4	2.1 *	0.2		0.0	1
2	*	0.1	0.1	1.4	4.9 *	24	25	4.1	1.5	0.2		0.0	2
3		0.2	0.2	1.4 *	5.2	27	23	4.1 *	1.1	0.2		0.0	3
4		0.2	1.1 *	1.1	9.3	71	20	3.8	1.0	0.2		0.0	4
5		0.0	0.6	1.0	8.5	40	18 *	3.8	0.9	0.1		0.0 *	5
6		0.1	1.0	0.9	45	58	16	3.6	0.8	0.2 *	*	0.0	6
7		0.3	2.4	1.0	53	59	15	3.4	0.7	0.2		0.0	7
8		0.4	1.9	1.5	23	50	13	3.0	0.6	0.1		0.1	8
9		0.5	1.4	40	18	34	13	3.0	0.8	0.1		0.1	9
10		1.0	1.0	30	244	29	12	2.6	0.7	0.1		0.1	10
11		2.8	0.8	34	517	95	11	2.6	0.7	0.1		0.1	11
12		1.1	0.8	166	186	46	10	2.2	0.7	0.2		0.0	13
13		1.8	0.8	22	68	32	11	2.4	0.8	0.1		0.0	13
14	N	15	0.7	11	127	25	10	3.0	0.8	0.2	N	0.0	14
15	O	5.2 *	0.7	7.8	89	20	8.9	2.6	0.8	0.2	O	0.0	15
16	F	2.8	0.8	136	42	16	8.5	2.4	0.7	0.2	F	0.0	16
17	L	1.1	82	83 *	28	14	8.5	2.2	0.6	0.1	L	0.0	17
18	O	0.5	15	61	20	13	7.8	1.9	0.6	0.1	O	0.0	18
19	W	0.3	18	39	16	12	7.4	1.9	0.5	0.1	W	0.0	19
20		0.2	7.4 *	18	14	99 *	6.7	1.9	0.5	0.1		0.0	20
21		0.2	4.4	13	12	84	6.4	1.9	0.5	0.1		0.0	21
22		0.2	4.6	10	10	89	6.1	1.9	0.5	0.1		0.0	32
22		0.2	4.4	7.8	8.9	74	5.8	1.6	0.5	0.1		0.0	23
24		0.1	3.2	6.7	11	55	5.4	1.8	0.4	0.1		0.0	24
25		0.1	2.4	6.4	8.9	43	5.4	1.9	0.4	0.1		0.0	25
26		0.1	2.1	5.8	36	79	5.2	1.8	0.3	0.1		0.0	26
27		0.1	1.9	5.2	47 *	53	4.9	1.5	0.4	0.1		0.0	37
28		0.2	2.4	4.4	62	58	4.6	1.3	0.3	0.1		0.0	28
29		0.1	1.8	4.9		43	4.6	0.9	0.2	0.0		0.0	29
30		0.1	1.6	6.1		36	4.6	0.8	0.2	0.0		0.0	30
31			1.5	5.8		39		0.9		0.0			31
MEAN		1.2	5.4	23.7	62.8	46.7	11.0	2.4	0.7	0.1		0.4	MEAN
MAX.		15	82	166	547	99	31	4.4	2.1	0.2		0.1	MAX.
MIN.		0.0	0.1	0.9	4.9	12	4.6	0.8	0.2	0.0		0.0	MIN.
AC. FT.		69	331	1455	3487	2874	652	149	41	8		1	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
12.4	901	5.35	2	11	0600	0	2.55	10	1	0015	9066

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 42 58	120 11 20	SE34 2S 16E	1770E	5.71	12-23-64	DEC 58-DATE		1958		0.00	LOCAL

Station located on downstream side of Dogtown Road Bridge, 0.5 mile northeast of Coulterville. Tributary to Merced River. Drainage area is 17.0 square miles. Maximum discharge of record from rating curve extended above 902 cfs. Altitude of gage is 1,740 feet (from U. S. Geological Survey topographic map). There are no upstream impairments.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07375	SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT
1	128	101	263	168	775	2090	2090	342	190	165	181	204
2	153	117 *	251	159 *	683	2709 *	2177	344	205	169	157	210
3	128	113	240	153	609	2709	2228 *	350 *	215	167	151 *	213
4	101	112	216 *	143	561	2342	2081	340	215	171	151	212
5	81 *	126	208	131	524 *	2049	1749	352	236	172	134	186
6	67	115	212	133	521	2163	1646	356	238 *	162	128	161
7	57	105	211	132	519	2327	1654	356	205	150	128	165
8	51	100	207	136	632	2547	1510	348	184	160	134	220
9	54	105	210	172	732	2928	1387	318	177	151 *	153	276
10	50	113	206	215	730	3062	1429	292	157	168	147	276
11	63	131	188	334	1313	2822	1380	294	154	172	141	253
12	59	176	172	470	2567	2502	1159	287	180	158	172	236
13	66	216	162	529	3631	2371	928	285	184	143	190	228
14	70	266	171	657	4145	2294	769	283	193	139	226	213
15	84	382	208	598	4214	2022	696	289	177	139	212	215
16	97	768	253	556	4027	1732	669	298	184	145	172	223
17	85	992	246	702	3833	1483	677	292	199	139	153	243
18	85	946	250	2030	3702	1244	635	274	187	151	153	267
19	97	804	368	2470 *	3649	1142	629	244	207	150	147	269
20	97	683	526	2500	3625	1142	598	205	216	147	143	260
21	165	589	581	2270	3573	1380	565	243	220	168	138	239
22	183	501	528	1890 *	3446	2205	498	250	212	190	146	243
23	156	450	458	1510	3198	2627	474	246	186	181	158	272
24	139	424	413	1220	2698	2632	477	258	177	158	175	298
25	129	388	382	1010	1942	2375	454	244	186	171	178	285
26	127	345	337	849	1541	2045	414	233	202	184	190	274
27	109	325	291	777	1585	1960	368	248	193	165	187	278
28	71	314	247	735	1707	2191	348	269	183	143	188	276
29	83	301	214	678		2182	360	243	192	145	196	251
30	96	281	196	644		2036	360	204	190	181	205	238
31	98		180	755		2058		193		199	207	
MEAN	97.7	346	277	798	2167	2173	1014	283	195	161	166	239
MAX.	183	992	581	2500	4214	3062	2228	356	238	199	226	298
MIN.	50	100	162	131	519	1142	348	193	154	139	128	16
AC. FT.	6008	20610	17050	49040	120361	133628	60315	17415	11591	9923	10197	14

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTA
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE F
650	4252	65.77	2	15	0030	47	54.31	10	8	0230	4704

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	R DA
37 18 35	120 55 45		9180a	68.05	2-26-69	MAR 37-DATE		1944	1957	-3.73	US
								1957	1959	-3.77	US
								1959		0.00	US

Station located 30 feet below Fremont Ford Bridge, 4.5 miles west of Stevinson, 6.7 miles upstream from the Merced River. Drainage area is approximately 8,090 square miles. Flow records were published in U. S. Geological Survey report "Surface Water Records of California" prior to 1972.

a During periods of high flow some water bypasses the station through three overflow channels known as North, Middle, and South Mud Sloughs.

LE B-3 (Cont.)

MEAN DISCHARGE

BIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B05170	MERCED RIVER BELOW SNELLING

OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
785	123	145	128	153	186	153	181	139 *	82	78	86	1
762	124	145	133	153 *	175 *	151	189 *	142	79	94	97	2
766	115 *	141	135 *	155	181	151	140	135	95	89 *	91	3
771	113	148 *	135	153	207	153	136	133	95	84	96	4
789 *	114	146	133	151	173	187 *	125	137	101	88	99 *	5
785	113	152	139	176	213	203	133	139	95 *	84	92	6
780	122	152	134	170	211	243	136	138	94	86	109	7
780	127	151	137	156	383	299	134	151	93	87	102	8
359	130	147	150	153	195	231	132	152	91	79	104	9
150	143	145	164	218	187	212	127	154	91	78	106	10
145	161	143	143	764	193	202	137	140	93	80	108	11
123	144	145	168	290	176	208	134	136	100	92	102	12
117	155	147	144	246	168	166	136	131	96	86	101	13
117	203	143	140	281	163	179	142	127	91	73	104	14
117	204	144	136	221	159	174	131	114	92	71	115	15
117	191	140	343	185	164	175	134	121	96	77	118	16
116	173	194	286	175	162	179	143	125	91	78	117	17
114	168	181	178	170	156	178	150	134	88	63	119	18
109	164	199	169	172	160	173	143	131	86	73	115	19
112	158	158	152	164	301	156	139	132	77	78	107	20
112	160	154	146	168	184	150	125	122	80	73	109	21
111	162	164	142	164	187	170	101	107	82	85	112	22
114	145	153	146	166	164	153	133	89	84	78	123	23
116	150	150	144	171	164	134	133	94	92	81	130	24
116	147	147	144	165	161	130	117	89	89	86	126	25
114	149	139	145	178	234	137	133	103	83	82	130	26
114	149	144	140	192	171	129	136	99	82	81	135	27
114	146	141	145	260	169	124	131	93	83	91	125	28
119	152	140	155		161	133	117	98	83	90	132	29
123	149	137	151		161	144	121	95	80	84	135	30
123		132	147		160		130		71	89		31
296	148	151	157	206	188	173	135	123	88.2	81.9	112	MEAN
789	204	199	343	764	383	299	189	154	101	94	135	MAX.
109	113	132	128	151	156	124	101	89	71	63	86	MIN.
18230	8834	9255	9624	11450	11560	10270	8329	7339	5423	5034	6635	AC.FT.

MATED
RECORD
HARGE MEASUREMENT OR
RVATION OF NO FLOW
D *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
155	1330	9.40	2	11	0845	36	5.67	8	18	1345	112000

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
TITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
7 30 06	120 27 03	NE17 5S 14E	14500	17.10	1-7-65	NOV 58-DATE		1958		221.12	USGS

ation located 0.2 mile downstream from Merced-Snelling highway bridge, 1.4 miles southwest of Snelling. Flow egulated by upstream reservoirs and dams. Drainage area is 1,096 square miles. Prior to November 1958, records vailable for a site 3.6 miles downstream. Merced Irrigation District Main Canal and several small gravity diver-ions are upstream from station.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B05155	MERCED RIVER AT CRESSEY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	820	164	204	201	339	546	304	169	161 *	77	87	105	1
2	823	167	204	193	323 *	370 *	287	201 *	185	77	79	110	2
3	800	167 *	204	193 *	312	331	268	206	204	79 *	69 *	120	3
4	797	183	204 *	196	304	472	268	169	214	62	79	135	4
5	800 *	196	206	196	298	417	268 *	188	188	77	89	120 *	5
6	809	188	209	196	274	339	290	188	172	64	97	125	6
7	806	190	217	201	375	511	301	190	167	64	110	135	7
8	788	185	212	204	359	1021	345	177	159	87	92	146	8
9	788	169	212	214	312	724	356	175	159	87	84	146	9
10	387	164	209	257	327	436	320	169	164	69	102	138	10
11	268	204	206	312	3253	392	295	167	169	62	107	135	11
12	247	233	204	357	2274	406	285	169	172	52	112	143	12
13	217	263E	201	403	817	345	276	180	172	47	123	148	13
14	196	276E	201	290	578	317	260	177	169	43	125	164	14
15	201	293E	198	263	842	304	266	161	161	84	100	196	15
16	198	304	198	298	527	295	257	161	161	92	69	169	16
17	196	285	204	889	439	293	241	175	169	94	67	188	17
18	196	268	394	549	397	287	241	177	167	84	62	201	18
19	188	252	345	475	378	279	233	169	143	92	64	204	19
20	183	244	388	364	356	537	220	167	148	92	57	190	20
21	183	233	276	309	337	562	209	169	141	105	50	185	21
22	183	230	255	293	334	420	206	167	135	110	55	183	22
23	177	230	249	287	317	372	225	141	128	100	45	193	23
24	183	214	249	282	312	317	209	154	125	84	50	204	24
25	180	214	239	279	331	304	201	190	130	72	60	206	25
26	177	209	236	279	315	654	183	190	84	77	84	198	26
27	172	212	220	276	437	518	164	193	57	69	92	193	27
28	164	209	222	274	867	381	146	206	69	72	94	201	28
29	164	204	214	279		345	164	193	55	92	89	206	29
30	164	206	206	477		312	185	167	52	100	102	209	30
31	167		206	460		298		156		102	123		31
MEAN	375	219	232	314	583	423	249	176	146	79.6	84.5	167	MEAN
MAX.	823	304	394	889	3253	1021	356	206	214	110	125	209	MAX.
MIN.	164	164	198	193	274	279	146	141	52	43	45	105	MIN.
AC. FT.	23050	13000	14270	19330	32400	25990	14820	10830	8688	4895	5193	9909	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
252	6095	20.77	2	11	2100	1.8	10.40	7	14	0200	182400

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 25 28	120 39 47	SW 9 6S 12E	34400	22.67	12-4-50	JUL 41-DATE	APR 41-JUL 41	1950	1962	96.24	USCGS
				32.67a	12-4-50			1962		86.23	USCGS

Station located 150 feet downstream from McSwain Bridge, immediately north of Cressey. Prior to May 20, 1960, station located 250 feet upstream from bridge. Flows regulated by upstream reservoirs and diversions. Drainage area is 1,224 square miles.

a Reflects present datum.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B00525	MUSTANG CREEK NEAR BALLICO

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15					INSUFFICIENT DATA TO PUBLISH[a]								15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN													MEAN
MAX.													MAX.
MIN.													MIN.
AC. FT.													AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REP. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 29 58	120 39 48	NW16 5S 12E	281	5.63	1-21-69	NOV 65 -DATE		1965		0.00	LOCAL

Station located at Oakdale Road Bridge, 4.0 miles northeast of Ballico. Altitude of gage is 180 feet (from U. S. Geological Survey topographic map). Drainage area is 11 square miles.

a Discharge measurements and partial gage height records are available in DWR files.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B08735	ORESTIMBA CREEK BELOW HIGHWAY 33

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.2	0.0	*	0.0	11	211	9.5	13	7.3	9.2	27	34	1
2	0.0	0.0		0.0 *	6.1 *	124	4.5	9.6 *	13	13	16	29	2
3	0.0	0.0		0.0	3.9	94	6.6	9.9	8.3	15	14 *	38	3
4	0.0 *	0.0		0.0	2.6	85	62	10	13	12	11	32	4
5	0.0	0.0		0.0	3.1	68	17	9.5	2.6 *	9.2	13	31 *	5
6	0.1	0.0		0.0	205	65	11 *	15	2.5	9.5	15	0.0	6
7	0.0	0.0		0.0	804	79	5.2	16	3.0	8.4	13	8.0	7
8	0.0	0.0 *		0.0	251	58	5.4	23	4.7	8.5	13	0.1	8
9	0.2	0.0		0.0	130	46	95	9.5	3.3	9.2	13	9.6	9
10	0.0	0.0		106	296 *	35	34	8.3	2.7	9.3 *	11	0.2	10
11	0.0	0.0		49 *	798	30	4.6	9.2	4.1	7.5	9.5	0.2	11
12	0.0	0.0	N	7.3	478	25	6.3	16	9.9	9.1	34	0.0	12
13	0.0 *	0.2	O	3.1	497	21	18	25	12	11	34	0.0	13
14	0.0	14		0.0	342	18	27	60	5.0	12	7.7	0.0	14
15	0.0	13 *	*	0.0	240	15 *	8.5	17	17	13	13	13	15
			F										
16	0.0	48	L	207	152	13	8.4	16	6.0	41	4.9	1.1	16
17	0.3	66	O	439	114	11	7.6	12	2.9	15	5.6	24	17
18	0.0	8.4	W	178 *	89	11	6.2	9.0	16	13	6.8	0.3	18
19	0.0	0.0		251	69	9.9	6.4	9.3	13	13	6.0	0.3	19
20	0.0	0.0		103	51	51 *	8.9	80	10	9.5	5.7	11	20
21	0.0	0.0		54	36	39	11	112	8.0	10	5.9	34	21
22	0.0	0.0		28	26	41	14	102	8.3	50	10	43	22
23	0.0	0.0		12	20	19	16	38	8.9	29	33	59	23
24	0.0	0.0		4.9	19	15	15	24	10	13	12	31	24
25	0.0	0.0		1.8	20	12	13	17	22	16	23	25	25
26	0.0	0.0		3.8	15	12	12	11	9.7	16	42	1.5	26
27	0.0	0.0		0.7	96	11	14	6.6	6.7	14	38	1.0	27
28	0.0	0.0		0.0	488 *	9.3	13	12	6.0	15	27	1.0	28
29	0.0	0.0		0.0		7.7	11	23	8.0	13	2.5	12	29
30	0.0	0.0		0.3		7.4	13	11	16	33	18	6.0	30
31	0.0			19		19		9.0		19	20		31
MEAN	0.0	5.0		47.4	188.0	40.7	161.4	24.0	8.7	15.3	16.3	14.8	MEAN
MAX.	0.3	66		439	804	211	95	112	22	50	42	59	MAX.
MIN.	0.0	0.0		0.0	2.6	7.4	4.5	6.6	2.5	7.5	2.5	0.0	MIN.
AC. FT.	2	297		2912	10440	2504	961	1474	516	943	1001	883	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
30.3	1340	8.08	2	11	1315	0.0	0.82	10	2	0000	21930

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 22 42	121 03 30	SE26 6S 8E				1959 to date					

Station located 1.0 mile south of intersection of Crows Landing Road and Highway 33 and is 400 feet east of highway. During the summer months the flows are irrigation drainage. Records are available for a station located 0.6 mile upstream operated by USBR 1948 to 1959. Also, records are available for a station located 4.5 miles downstream operated by the Department of Water Resources 1957 to 1972. Maximum discharge of record on 2-1-63 estimated as 2,650 cfs at gage height 12.08 by extending the rating curve above 1,654 cfs.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07200	SAN JOAQUIN RIVER AT PATTERSON BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	1300	569	955 *	648	1750	3860	2750	1050	751	668	652	784	1
2	1380	553	910	631 *	1730	4040 *	2730	1060 *	731	663	603	808	2
3	1370 *	552	884	616	1710	4280	2800	1040	749	617 *	593	800	3
4	1290	567	870	602	1450	4340	2880	1090	754	601	580	801	4
5	1210	553	844	588	1360 *	3880	2770	1070	741 *	599	644	779 *	5
6	1170	572	835	576	1430	3500	2440 *	1070	779	576	628	768	6
7	1170	597	834	569	1510	3500	2260	1130	722	556	582 *	755	7
8	1160	614 *	830	571	1590	3690	2210	1080	668	578	592	807	8
9	1140	599	840	588	1740	4270	2150	1070	658	610	602	853	9
10	1130	615	848	681	2110	5080	2130	993	642	595	620	895	10
11	1010	704	834	749	3420	5150	2090	987	615	583	640	890	11
12	854	744	813	855	4880	4740	1980	936	607	556	661	822	12
13	811	817	786	933	6090 *	4110	1780	923	665	546	672	790	13
14	762	909	757	1050	7260	3650	1730	991	653	524	656	788	14
15	713	1040	748	1060	8540	3380	1610	944	693	531	708	823	15
16	690	1300	756	1040	9420 *	2980	1470	949	657	609	682	821	16
17	688	1720	771	1450	9390	2600	1430	938	694	590	653	831	17
18	711	1870	764	1940	8720	2270	1350	879	723	530	636	856	18
19	651	1770	794	2980	8010	1990	1270	865	699	544	651	886	19
20	635	1730	964	3370 *	7500	1960	1240	872	711	589	673	903	20
21	1090	1620	1060	3520 *	7210	2000	1220	943	727	602	642	918	21
22	1590	1360	1080	3470	6950	2510	1260	948	652	652	624	922	22
23	1740	1260	1010	3190	6590	3070	1230	891	672	742	673	947	23
24	1740	1200	927	2770	5990	3590	1160	858	637	748	681	965	24
25	1740	1170	890	2160	5040	3730	1120	879	685	693	674	980	25
26	1740	1130	860	1880	3940	3460	1080	836	677	659	727	939	26
27	1740	1090	822	1750	3170	3070	1030	806	688	622	793	910	27
28	1180	1060	786	1730	3420	3100	1000	865	670	624	765	911	28
29	678	1040	738	1710		3060	1060	852	621	604	699	916	29
30	615	1010	697	1570		2980	1090	804	646	647	734	938	30
31	596		668	1680		2810		799		634	782		31
MEAN	1106	1011	844	1514	4711	3440	1744	949	686	609	662	860	MEAN
MAX.	1740	1870	1080	3520	9420	5150	2880	1130	779	748	793	980	MAX.
MIN.	596	552	668	569	1360	1960	1000	799	607	524	580	755	MIN.
AC. FT.	68020	60170	51920	93080	261600	211500	103800	58350	40830	37470	40710	51190	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
1490	9600	46.12	2	16	1930	506	32.47	7	19	0130	1079000

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 29 52	121 04 52	SW15 5S 8E		54.0	6-13-38		APR 38-SEP 66	1938	1959	0.00	USED
				50.47a	6-13-38	OCT 69-DATE		1959		0.00	USCGS
			9,600b	46.12	2-16-73			1959		3.53	USED

Station located 1000 feet downstream on left bank from the Patterson-Turlock Bridge, 3.1 miles northeast of Patterson. Drainage area is 9,758 square miles.

a Reflects present datum.
b Maximum discharge since station was rated in October 1969.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B04150	TUOLUMNE RIVER AT HICKMAN BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	79	574 *	859	276	674	476 *	386	174	79	85	210	80	1
2	631 *	568	854	280	960 *	413	220	128	78	79	267	87	2
3	1380	570	811	345	693	395	204	115 *	79	75	111	86	3
4	295	575	813 *	423 *	379	419	204	117	78 *	75	136	75	4
5	262	449	735	920	374	404	204 *	109	123	74	144	71 *	5
6	254	411	756	642	721	407	198	106	223	69	110 *	80	6
7	249	459	736	438	775	507	194	105	289	74	92	77	7
8	246	458	735	458	635	606	194	102	281	73	85	79	8
9	244	455	735	694	632	544	190	103	320	73	84	77	9
10	243	475	707	687	608	436	189	108	189	130	78	81	10
11	242	496	694	681	1270	427	188	103	102	152	75	77	11
12	244	457	723	749	820	423	187	102	78	114 *	83	78	12
13	244	428	749	642	834	460	210	98	78	97	99	85	13
14	292	491	878	448	674	460	177	97	74	91	81	96	14
15	271	496	785	458	673	456	177	1280	73	83	183	80	15
16	371	503	461	742	569	420	174	489	73	84	246	80	16
17	510	483	322	873	489	424	174	128	72	81	130	78	17
18	297	472	344	873	337	420	173	109	75	75	102	77	18
19	291	424	389	1060	327	427	173	97	75	74	84	77	19
20	289	552	340	707	321	506	169	94	73	76	80	79	20
21	529	854	332	484	469	472	167	92	266	75	75	81	21
22	488	859	310	463	415	472	177	89	391	79	73	78	22
23	283	853	311	835	372	458	176	85	107	81	72	79	23
24	357	805	303	835	397	452	178	79	90	73	70	81	24
25	554	850	295	828	376	453	182	65	87	75	69	80	25
26	465	806	303	721	364	565	181	87	182	183	75	78	26
27	277	804	310	575	643	511	183	87	502	382	79	75	27
28	354	850	307	438	679	480	181	88	434	159	80	75	28
29	461	864	291	479		469	181	82	390	151	82	84	29
30	338	860	291	960		471	183	81	103	106	79	112	30
31	541		284	580		475		78		115	85		31
MEAN	374	607	541	632	589	462	192	152	169	104	107	80.8	MEAN
MAX.	1380	864	878	1060	1270	606	386	1280	502	382	267	112	MAX.
MIN.	79	411	284	276	321	395	167	78	73	69	69	71	MIN.
AC. FT.	22970	36100	33250	38860	32690	28380	11450	9316	10040	6373	6583	4806	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
333	3330	73.64	10	3	0245	67	69.57	7	5	2330	240800

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 38 10	120 45 14	NW34 3S 11E	59000	96.2	12-8-50	JUL 32-OCT 36 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE		1932		-1.13	USCGS

Station located at Hickman-Waterford road bridge, immediately south of Waterford. Flow regulated by reservoirs and powerplants. Drainage area is 1,655 square miles. In August 1964, this station was moved approximately one-quarter mile downstream to a point immediately upstream of the new Hickman-Waterford road bridge.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B04130	DRY CREEK NEAR MODESTO

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	85	15	109	29	228	757	64	83	72	69	72	79	1
2	76	14 *	110	27	131	250	66	81 *	74	69 *	70 *	78	2
3	72	13	111	25	103	172	58	86	77	71	69	85	3
4	72 *	20	115	23 *	90	261	57 *	85	74 *	63	66	77	4
5	61	21	117 *	72	97 *	322	75	82	71	65	64	81	5
6	53	21	116	111	113	164	99	87	70	61	67	81 *	6
7	44	17	116	121	214	371	97	96	73	66	69	85	7
8	39	16	116	125	237	850	110	95	67	62	74	78	8
9	38	21	116	140	140	1400	102	87	66	62	69	70	9
10	40	30	118	487	143	284	87	84	69	67	69	73	10
11	42	51	119	959	1790	166	82	74	72	62	71	77	11
12	48	55	117	727	4690 *	194	117	84	73	60	68	79	12
13	49	45	115	1150	1480 *	122	69	83	78	60	57	76	13
14	49	44	114	295	649	102	80	78	78	66	59	79	14
15	49	93	113	159	968	95	91	79	82	61	64	85	15
16	43	183	112	203	420	81	115	84	91	66	73	79	16
17	36	200	113	1920 *	240	69	93	78	86	72	70	75	17
18	29	152	146	972	184	60	73	69	80	67	66	76	18
19	26	119	251	677	155	56	75	76	77	64	64	68	19
20	29	105	258	403	137	86 *	71	70	77	66	68	64	20
21	33	84	154	183	124	477	68	69	76	67	67	69	21
22	32	82	78	138	116	267	73	73	71	69	67	66	22
23	28	107	57	117	111	291	79	76	75	68	67	70	23
24	25	109	48	104	107	125	84	70	68	68	72	74	24
25	25	108	47	95	158	97	80	77	74	73	77	72	25
26	23	108	45	92	212	185	82	80	73	71	82	74	26
27	21	107	46	94	166	487	80	74	67	67	78	73	27
28	21	108	40	94	1230 *	147	84	81	68	73	71	68	28
29	17	108	36	81		104	87	70	67	65	73	69	29
30	16	108	32	88		83	85	69	66	71	76	63	30
31	16		28	472		70		68		72	74		31
MEAN	39.9	75.5	104	328	515	264	82.8	79.0	73.7	66.6	69.5	74.8	MEAN
MAX.	85	200	258	1920	4690	1400	117	96	91	73	82	85	MAX.
MIN.	16	13	28	23	90	56	57	68	66	60	57	63	MIN.
AC. FT.	2454	4491	6373	20200	28630	16260	4925	4856	4387	4092	4270	4449	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
146	6880	87.07	2	12	0400	12	67.40	11	3	1000	105400

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO OF GAGE	REF. DATUM
37 39 26	120 55 19	SE24 3S 9E	7710	88.04	12-23-55	MAR 41-DATE		1941		0.00	USCGS

Station located 0.1 mile downstream from Claus Road bridge, 4 miles east of Modesto. Tributary to Tuolumne River. June 1930 to March 1941 records available for a site 2.5 miles downstream. This is a Department of Water Resources-Modesto Irrigation District cooperative station. Drainage area is 192.3 square miles. There are no upstream impairments.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B04105	TUOLUMNE RIVER AT TUOLUMNE CITY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	236	595	1040 *	488	1100	1920	650	340 *	265	336	305	278
2	258	633	1040	482	936	1080 *	588	324	262	299	340	281
3	533 *	636 *	1020	509 *	985	759	436	303	268	283 *	361	285
4	925	709	998	611	843	749	417	301	269	271	305	284
5	524	669	1000	752	655	920	421	297	255	257	288	272
6	438	589	1020	881	736 *	831	450 *	299	254 *	247	294 *	269
7	410	554	1030	756	898	766	440	328	321	228	276	273
8	385	573	1020	653	1014	1390	446	306	367	225	281	295
9	366	640	1030	695	877	2950	444	304	386	227	251	287
10	368	636	1020	849	846	2500	443	279	395	225	259	256
11	368	643	998	1430	1260	2020	395	293	337	253	244	270
12	382	682	1000	1210	4480	1840	415	299	285	269	245	282
13	396	643	1030	1750	3830	1510	394	306	263	253	262	271
14	413	662	1090	1280	2000	1020	403	288	292	261	249	282
15	491	705	1040	790	1580	772	403	261	273	277	237	276
16	456	776	961	749	1600 *	690	422	763	272	268	271	296
17	497	825	776	1530	1110 *	632	396	604	298	256	353	290
18	558	800	669	2340	809	616	357	358	274	251	306	291
19	441	725	746	1600	722	596	336 *	319	259	262	310	279
20	421	653	776	1670	623	640	338	295	253	275	282	269
21	430	763	783	1050	560	1050	321	301	248	268	265	280
22	570	928	666	800 *	722	995	317	284	344	271	259	270
23	582	991	659	759	672	1020	336	287	449	288	262	307
24	458	1010	598	904	609	838	336	287	339	243	272	293
25	482	1000	567	935	664	697	353	286	299	218	267	306
26	611	1020	548	906	769	703	344	284	268	221	275	306
27	576	998	558	840	758	1120	330	287	311	277	259	303
28	453	1000	570	747	1080	985	328	271	476	363	253	302
29	470	1030	554	647		775	324	285	500	340	263	296
30	536	1040	530	746		713	334	268	442	358	261	295
31	476		509	1140		688		266		333	279	
MEAN	468	771	834	984	1170	1090	397	322	317	271	279	285
MAX.	925	1040	1090	2340	4480	2950	650	763	500	363	361	307
MIN.	236	554	509	482	560	596	317	261	248	218	237	256
AC. FT.	28780	45870	51260	60490	64930	67010	23640	19780	18890	16670	17130	1695

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
596	5556	33.78	2	12	2045	199	22.71	7	25	0215	431400

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	DF RECORD CFS	DF RECORD GAGE HT	DF RECORD DATE	DISCHARGE	GAGE HEIGHT DAILY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REFERENCE DATUM
37 36 12	121 07 50	NW 7 4S 8E		46.65	12- 9-50	1930-DATE			1959	0.00	USE
				43.15a	12- 9-50			1960		0.00	USC
			37900b	42.86	1-27-69			1960		3.50	USE

Station located at highway bridge, 3.35 miles above mouth. Backwater at times, from the San Joaquin River, affects the stage-discharge relationship. Drainage area is 1,896 square miles. Flows regulated by upstream reservoirs and diversions.

a Reflects present datum.
b Maximum discharge since Department of Water Resources began operation of station in April 1966.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07040	SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	1580	1390	2080	1330	2980	6050	4060	1320 #	555 E	926	890	973	1
2	1600	1400	2030	1300 *	2830	5680 *	3890	1260 E	670 E	915 *	898	1010	2
3	1730 *	1400 *	1980	1300	2780	5400	3780	1390 E	1210 E	879	872	1050	3
4	2140	1480	1960	1380	2580	5470	3800	1460 E	879 E	901	870	1020	4
5	1900	1480	1940 *	1470	2280 *	5450	3800	1590 E	936 E	860	856	968	5
6	1740	1410	1920	1600	2250	5040	3570 *	1550 E	913 E	841	909	955	6
7	1690	1390	1930	1580	2900	4700	3200	1480 E	925 #	788	839 *	964 *	7
8	1680	1430	1920	1460	3290	5080	3110	1460 E	899 E	766	790	1010	8
9	1680	1430	1920	1480	2890	5110	2940	1400 E	920 E	818	798	1090	9
10	1670	1440	1920	1690	2830	6800	2830	1420 E	882 E	837	803	1100	10
11	1640	1610	1900	2160	3390	6550	2710	1370 E	766 E	830	862	1100	11
12	1520	1690	1880	2340 *	6300	6330	2620	1390 E	798 E	814	949	1100	12
13	1460	1720	1860	2600	8770 *	5860	2450	1330 E	1160 E	827	930	1050	13
14	1430	1840	1860	2750	8520	5200	2240	1400 E	1320 E	815	909	1090	14
15	1440	1910	1790	2210	8610	4740	2120	1300 E	1210 E	876	866	1130	15
16	1400	2090	1820	2070	9430	4370	2040	1390 E	1160 E	907	922	1240	16
17	1370	2330	1740	2480	10000	3990	1940	1080 E	1190 E	941	933	1200	17
18	1460	2510	1620	4210 *	10100 *	3710	1810	567 E	1290 E	863	887	1190	18
19	1390	2470	1620	4110	9450	3360	1740 *	926 E	1140 E	783	852	1190	19
20	1300	2340	1740	4690	8620	3300	1630	1160 E	1080 E	839	894	1280	20
21	1360	2260	1900	4580	8020	3550	1620	1010 E	1070 E	909	830	1280	21
22	1910	2300	1890	4290 *	7750	4050	1640	926 E	1060 E	964	787	1270	22
23	2170	2260	1860	3960	7430	4450	1690	1280 E	1180 E	1010	816	1350	23
24	2150	2240	1760	3810	7040	4920	1610	1580 E	1180 E	970	885	1430	24
25	2150	2210	1660	3490	6470	5090	1570	1270 E	1120 E	894	904	1460	25
26	2240	2200	1600	3230	5630	5180	1520	926 E	1050 E	784	940	1490	26
27	2250	2150	1580	2900	4750	5000	1360	578 E	998 E	772	964	1460	27
28	2110	2120	1570	2700	4850	4920	1200	682 E	1150 E	865	991	1440	28
29	1620	2110	1510	2500		4620	1170	1170 E	1120 E	897	934	1460	29
30	1480	2110	1430	2400		4430	1310	913 E	1050 E	910	902	1480	30
31	1360		1390	2670		4240		532 E		909	919		31
MEAN	1697	1891	1793	2604	5812	4924	2366	1197	1029	868	884	1194	MEAN
MAX.	2250	2510	2080	4690	10100	6800	4060	1590	1320	1010	991	1490	MAX.
MIN.	1300	1340	1390	1300	2250	3300	1170	532	555	766	787	955	MIN.
AC. FT.	104400	112500	110200	160100	322800	302800	140800	73610	61250	53380	54350	71070	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
2165	10320	25.48	2	17	2400	532	17.05	5	31		1567000

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 38 28	121 13 37	SW29 3S 7E	45,550	36.87	2-28-69	JAN 50-MAR 52	SEP 43-DEC 49	1943	1959	0.00	USED
				38.31[a]	1-27-69	OCT 65-DATE	APR 52-SEP 65	1959		0.00	USCGS
								1959		3.41	USED

Station located at State Highway 132 Bridge, 13 miles west of Modesto, two miles upstream from mouth of the Stanislaus River. Gage height-discharge relation affected by backwater from the Stanislaus River during high flows in the Stanislaus. Flows regulated by upstream reservoirs and diversions. Drainage area is 12,400 square miles.

a This maximum gage height of record does not represent the maximum discharge of record as the station was affected by backwater from the Stanislaus River.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B03175	STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	37	93 *	382	899	1800 *	1760 *	3330	1600 *	4010	45	34	32	1
2	35	92	382	908	1780	1740	3190	1420	2490	44	36 *	32	2
3	34	93	382	902	1780	1760	3010	1080	2910	43	37	32	3
4	58 *	122	396 *	736 *	1790	1910	2860 *	870	2640	46	40	33	4
5	88	118	387	727	1780	1780	2480	395	2370	49	40	33	5
6	90	116	398	730	1870	910	2310	393	2430	49	42	34 *	6
7	166	114	421	719	1870	2210	2010	390	2460 *	49	43	34	7
8	167	118	422	709	1820	2950	1960	387	2370	44	38	36	8
9	175	115	413	877	1800	3000	1550	385	2360	38	31	34	9
10	169	120	416	1310	2170	2880	1100	383	2630	37	32	31	10
11	167	122	406	1350	2990	2830	874	380	2660	35	30	30	11
12	169	117	382	2240	2850	2700	865	378	1850	33 *	31	30	12
13	169	115	397	1950	3600 *	2430	1050	376	953	35	30	29	13
14	172	123	389	1890	3730	2190	1360	373	550	37	30	29	14
15	175	129	393	1650	3570	2200	1410	280	570	36	30	33	15
16	291	165	397	2410	3290	2670	1410	1720	325	42	29	34	16
17	426	142	457	2190 *	2440	3670	1240	4010	181	42	33	34	17
18	346	125	543	2090	2000	3700	869	3560	115	40	34	31	18
19	376	124	752	2010	1760	3700	848	3200	90	36	31	30	19
20	244	125	757	1930	1500	4060 *	790	3450	79	37	30	33	20
21	88	131	859	1910	1760	4100	446	3870	71	39	29	34	21
22	81	303	867	1890	1760	4210	419	3030	65	38	30	33	22
23	81	398	872	1870	1770	3960	394	1650	69	34	32	34	23
24	84	399	887	1860	1770	3920	358	1460	72	33	35	37	24
25	84	396	887	1860	1770	3810	691	2140	73	36	36	33	25
26	76	395	888	1860	1790	3840	1440	3420	68	40	35	32	26
27	77	396	897	1830	2050	3760	1460	3880	60	39	36	32	27
28	84	404	913	1820	2010	3720	1550	2990	58	37	40	32	28
29	92	405	914	1810		3670	1550	3240	50	34	39	30	29
30	92	395	907	1960		3560	1580	4330	46	33	34	30	30
31	92		901	1830		3390		4280 *		42	29		31
MEAN	145	200	602	1572	2174	3032	1481	1914	1156	39.5	34.1	32.4	MEAN
MAX.	426	405	914	2410	3730	4210	3330	4330	4010	49	43	37	MAX.
MIN.	34	92	382	709	1500	1740	358	280	48	33	29	29	MIN.
AC. FT.	8896	11920	37020	96650	120700	186400	88150	117700	68780	2428	2095	1926	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	GAGE HT.	MO.	DAY	TIME	MINIMUM DISCHARGE	GAGE HT.	MO.	DAY	TIME	TOTAL ACRE FEET
1026	4880	9.90	3	21	2215	22	1.35	10	4	0000	742700

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T & R M.D B.&M	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 47 18	120 45 41	SW 4 2S 11E	62000	31.8	12-23-55	JUN 28-DEC 39 APR 40-DATE				117.21	USCGS

Station located at bridge, 5.0 miles east of Oakdale. Flow regulated by reservoirs and powerplants. Drainage area is 1,020 square miles. This station is equipped with radio telemeter.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B03115	STANISLAUS RIVER AT KOETITZ RANCH

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	203	154	582	899	1900	2170 *	3480	1720	4190	404	211	306	1
2	237	154	574	900	1840	1930	3400	1730	4170	366	208	355	2
2	239	153 *	576	903 *	1820	1880	3330	1610 *	3310	368	223	346	3
4	272 *	167	581	903	1810	1920	3230 *	1360	3160	382	218	331	4
5	286	182	587 *	796	1820 *	1970	3080	1170	3010	373	283	285	5
6	246	181	589	765	1830	1860	2810	840	2710	333	251 *	314 *	6
7	219	185	594	759	1960	1970	2640	762	2660 *	346	241	324	7
8	201	184	610	756	1960	2290	2400	726	2640	340	251	312	8
9	227	184	614	763	1880	2960	2310	658	2550	349	241	302	9
10	238	191	609	883	1890	2980	1980	615	2570	314	253	327	10
11	235	200	605	1180	2340	2880	1680	593	2750	303 *	258	310	11
12	227	210	602	1350	3080 *	2800	1430	530	2790	297	234	290	12
13	233	206	582	1880	3070	2680	1340	534	2170	280	227	331	13
14	236	208	584	1840	3440	2480	1530	491	1470	256	233	329	14
15	238	219	586	1770	3550	2280	1820	479	1170	294	252	284	15
16	241	240	585	1680	3620	2230	1850	458	1060	278	249	344	16
17	266	265	592	2180	3400	2480	1780	1200	944	300	230	396	17
18	423	249	625	2340 *	2800	3210	1590	3050	758	278	247	380	18
19	402	225	685	2160	2300	3420	1260	3300	639	297	289	329	19
20	425	208	764	2050	2040	3510	1230	3190	548	298	298	372	20
21	376	202	772	1930	1820	3700	1150	3340	508	285	264	353	21
22	246	249	833	1890	1900	3830	937	3640	515	280	238	299	22
22	198	313	853	1870	1920	4010	876	3300	490	294	244	298	22
24	179	458	863	1860	1900	3880	755	2190	485	271	284	334	24
25	169	510	875	1860	1900	3800	689	1850	501	280	263	329	25
26	164	537	885	1860	1880	3790	864	2220	447	265	248	341	26
27	157	550	889	1860	1900	3820	1420	3130	426	232	269	366	27
28	153	558	894	1840	2080	3760	1550	3730	386	231	271	391	28
29	152	570	900	1820		3730	1640	3350	399	221	240	354	29
30	152	578	905	1840		3650	1720	3280	369	264	245	310	30
31	154		906	1990		3600		3900		245	270		31
MEAN	239	283	700	1528	2273	2951	1860	1901	1660	301	249	331	MEAN
MAX.	425	578	906	2340	3620	4010	3480	3900	4190	404	298	396	MAX.
MIN.	152	153	574	756	1810	1860	689	458	369	221	208	284	MIN.
AC. FT.	14670	16840	43040	93970	126200	181400	110600	116900	98770	18490	15340	19720	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
1183	4280	40.63	6	2	0545	152	26.80	10	29	0000	856100

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 41 57	121 10 08	SW 2 3S 7E		50.5a	12-24-55	OCT 62-DATE	MAR 50-SEP 62	1950	1962	-0.63	USC&GS
								1963	1969	0.37	USC&GS
								1970		0.00	USC&GS

Station located on left bank 9.35 miles upstream from mouth, 0.6 mile northwest of Bacon and Gates Road Junction, 3.7 miles southwest of Ripon. It is possible that backwater from San Joaquin River could affect the stage-discharge relationship. Flow regulated by upstream reservoirs and diversions. Drainage area is 1,094 square miles.

a Water bypasses station by overflowing flood plain on right bank and discharge is not computed. Overflowing occurs at approximately 45 feet gage height.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	B07020	SAN JOAQUIN RIVER NEAR VERNALIS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	1840	1440	2730 *	2300	4870	7920	7280	2860	4670	1250	1050 *	1190	1
2	1830	1470 *	2680	2200	4690 *	7700	7090	2820	4750	1270	1050	1270	2
3	2000	1490	2620	2210	4590	7240	6920 *	2810	4360	1150	1020	1380	3
4	2320	1560	2540	2240	4440	7280	6870	2620	3920	1190	1040	1300	4
5	2280	1610	2510	2250	4160	7410	6790	2540	3820	1160	1050	1210 *	5
6	2140	1530	2500	2290	4080	7020	6470	2180	3500	1070	1110	1170	6
7	2000	1500	2500	2290	4730	6680	5960	2040	3460	1010	1020	1230	7
8	1980	1520	2510	2170 *	5270	7100	5620	1990	3420	992	960	1280	8
9	1980	1550	2510	2170	4900	8300	5380	1870	3350	1050	975	1380	9
10	1960 *	1550	2510	2350	4700	9380	4990	1840 *	3340	1050	960	1400	10
11	1930	1730	2510	3030	5310	9120	4590	1780	3420	986	1050	1370	11
12	1800	1880	2490	3550	8200	8860	4240	1730	3490 *	997	1140	1380	12
13	1690	1930	2470	4070	11100	8420	3930	1680	3190	992	1100	1310	13
14	1650	2060	2450	4520	11400 *	7720	3790	1700	2630	955	1070	1350	14
15	1680	2160	2460	3970	11500	7100	3950	1600	2240	1050	1050	1390	15
16	1620	2380	2420	3740 *	12300	6730	3960	1660	2090	1120 *	1090	1500	16
17	1570	2700	2360	4330	12900	6360	3800	2130	2000	1140	1100	1540	17
18	1710	3000	2240	6410	12900	6540	3540	3540	1910	1090	1080	1510	18
19	1740	3020	2260	6370	12000	6550	3100	4100	1660	997	1050	1470	19
20	1650	2830	2430 *	6660	11000	6540	2900	4190	1520	1050	1100	1550	20
21	1650	2660	2680	6520	10200	6730	2810	4210	1470	1110	1050	1590	21
22	2200	2690	2750	6140 *	9760	7230	2620	4440	1470	1140	955	1490	22
23	2580	2720	2740	5850	9500	7710	2540	4440	1560	1230	950	1580	23
24	2580	2770	2700	5620	9130	8130	2280	3560	1560	1170	1070	1720	24
25	2550	2820	2580	5340	8590	8280	2130	2950	1520	1120	1100	1720	25
26	2650	2830	2510	5070	7760	8310	2040	3020	1410	1020	1140	1790	26
27	2700	2810	2440	4740	6910 *	8250	2380	3630	1340	960	1190	1770	27
28	2560	2770	2420	4510	6780	8200	2620	4320	1440	1000	1230	1740	28
29	2890	2750	2380	4280		7890	2660	4360	1430	1070	1150	1780	29
30	1580	2760	2330	4170		7710	2850	4070	1340	1080	1100	1760	30
31	1430		2330	4470		7530		4360		1080	1080		31
MEAN	1992	2216	2502	4059	7988	7611	4203	2937	2576	1082	1067	1471	MEAN
MAX.	2700	3020	2750	6660	12900	9380	7280	4440	4750	1270	1230	1790	MAX.
MIN.	1430	1440	2240	2170	4080	6360	2040	1600	1340	955	950	1170	MIN.
AC. FT.	122500	131900	153800	249600	443600	468000	250100	180600	153300	66540	65610	87510	AC. FT.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# – E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
3278	13100	21.63	2	18	0100	950	9.64	8	23		1196399

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 40 34	121 15 55		79000	27.75	12-9-50	JUL 22-DEC 23		1931	1959	8.4	USED
				32.81a	12-9-50	JAN 24-FEB 25					
			52600	34.55	1-27-69	JUN 25-OCT 28		1931	1959	5.06	USCGS
						MAY 29-DATE				0.00	USCGS

Station located on left bank 20 feet downstream from the Durham Ferry Highway Bridge, 3 miles downstream from the Stanislaus River 3.4 miles northeast of Vernalis. Drainage area is approximately 13,540 square miles. Natural flow of stream affected by storage reservoirs, power developments, ground water withdrawals and diversions for irrigation. Low flows consist mainly of return flow from irrigation. This station is operated under the Federal-State Cooperative Program. Equipped with DWR radio telemeter. The records are furnished by the U. S. Geological Survey.

a Reflects present datum. The gage height of 32.81 feet does not represent the maximum discharge of 79,000 cfs as water was bypassing the station through levee breaks upstream from station.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C01120	SOUTH FORK KINGS RIVER BELOW EMPIRE WEIR #2

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1									0	0	0		1
2									0	0	0		2
3									0	0	0		3
4									0	0	0		4
5									0	8	0		5
6									0	25	0		6
7									0	17	0		7
8									0	0	0		8
9									0	0	10		9
10									0	0	11		10
11	N	N	N	N	N	N	N	N	0	0	0	N	11
12	O	O	O	O	O	O	O	O	0	0	0	O	12
13									0	0	0		13
14	F	F	F	F	F	F	F	F	0	0	0	F	14
15	L	L	L	L	L	L	L	L	0	0	0	L	15
16	O	O	O	O	O	O	O	O	0	0	0	O	16
17	W	W	W	W	W	W	W	W	0	0	0	W	17
18									0	0	0		18
19									0	0	10		19
20									0	0	24		20
21									0	0	29		21
22									0	0	29		22
23									0	0	29		23
24									0	0	31		24
25									0	0	18		25
26									0	0	0		26
27									12	0	0		27
28									14	0	0		28
29									0	0	0		29
30									0	0	0		30
31									0	0	0		31
MEAN									1	2	6		MEAN
MAX.									14	25	31		MAX.
MIN.									0	0	0		MIN.
AC. FT.									52	99	379		AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
1.4	31		8	24		0		10	1		530

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 10	119 50	NW20 20S 20E	4102a		6-12-69	1937-DATE					

Station located 1.0 mile southwest of Stratford. South Fork Kings River, composed of Kings River water, is a tributary to the Tulare Lake area. Records furnished by Kings River Water Association.

a Maximum discharge since 1950.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C02602	CROSS CREEK BELOW LAKELAND CANAL #2

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13						NO FLOW							13
14													14
15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN													MEAN
MAX.													MAX.
MIN.													MIN.
AC. FT.													AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 12 42	119 34 05	NE 10 20S 22E				1921-DATE					

Station located downstream from Cross Creek Weir, 4 miles east of Guernsey. Tributary to Tulare Lake area. At times the flow is a combination of water from Kaweah River, Kings River, and Cottonwood Creek. Records are computed by the use of weir measurements taken at daily intervals and are furnished by the Corcoran Irrigation District.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03913	FRIANT-KERN CANAL DELIVERY TO PORTER SLOUGH

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1							0	2	5	9	6	0	1
2							10	5	4	9	8	0	2
3							12	5	4	6	8	0	3
4							12	6	5	6	8	0	4
5							14	6	6	6	6	0	5
6							14	6	6	6	6	0	6
7							11	6	8	8	4	0	7
8							11	7	9	7	4	0	8
9							11	8	10	10	4	0	9
10							11	7	10	11	4	0	10
11							2	8	10	9	0	0	11
12	N	N	N	N	N	N	0	9	11	7	0	0	12
13	O	O	O	O	O	O	0	7	8	7	2	5	13
14							0	7	9	9	9	7	14
15							0	5	9	9	9	7	15
16	F	F	F	F	F	F	0	4	8	11	9	7	16
17	L	L	L	L	L	L	0	4	8	13	6	6	17
18	O	O	O	O	O	O	0	4	8	10	0	5	18
19	W	W	W	W	W	W	0	0	11	10	0	6	19
20							0	0	9	10	0	6	20
21							0	5	10	10	8	6	21
22							0	7	8	8	7	4	22
23							0	7	8	10	7	4	23
24							0	7	4	12	6	4	24
25							3	5	6	8	6	4	25
26							3	3	11	5	6	4	26
27							3	4	14	5	8	4	27
28							5	5	14	5	8	4	28
29							5	5	13	5	0	0	29
30							5	8	10	6	0	0	30
31								8		6	0		31
MEAN							4.4	5.5	8.5	8.2	4.8	2.8	MEAN
MAX.							14	9	14	13	9	7	MAX.
MIN.							0	0	4	5	0	0	MIN.
AC. FT.							262	337	508	502	296	165	AC. FT.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# – E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	GAGE HT.	MO.	DAY	TIME	MINIMUM DISCHARGE	GAGE HT.	MO.	DAY	TIME	TOTAL ACRE FEET
2.9	14	0.42	6	27	0800	0		10	1	0015	2070

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.O.B.&M	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 05 00	119 04 50	SW20 21S 27E				MAY 50-DATE					

These flows are deliveries from Friant-Kern Canal into Porter Slough. Delivery is at the intersection of Porter Slough with the Friant-Kern Canal approximately 4 miles west of Porterville. Records furnished by U. S. Bureau of Reclamation.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03923	FRIANT-KERN CANAL DELIVERY TO TULE RIVER

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1					0	0		239	166				1
2					0	144		174	148				2
3					0	212		174	147				3
4					0	219		174	145				4
5					0	220		174	147				5
6					0	220		176	145				6
7					0	220		154	145				7
8					34	220		138	145				8
9					51	223		140	145				9
10					58	225		155	145				10
11					58	66		166	145				11
12	N	N	N	N	57	0	N	166	145	N	N	N	12
13	O	O	O	O	0	0	O	165	145	O	O	O	13
14					0	0		161	145				14
15					0	0		165	145				15
16	F	F	F	F	0	0	F	166	145	F	F	F	16
17	L	L	L	L	0	0	L	166	145	L	L	L	17
18	O	O	O	O	0	0	O	166	147	O	O	O	18
19	W	W	W	W	0	0	W	166	145	W	W	W	19
20					0	0		162	145				20
21					0	0		155	145				21
22					0	0		154	130				22
23					0	0		162	145				23
24					0	0		164	145				24
25					0	0		155	79				25
26					0	0		155	0				26
27					0	0		154	0				27
28					0	0		154	0				28
29						0		155	0				29
30						0		152	0				30
31						0		154					31
MEAN					9.2	63.5		163	119				MEAN
MAX.					58	225		239	166				MAX.
MIN.					0	0		138	0				MIN.
AC. FT.					512	3906		10038	7089				AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
29.8	353	3.00	5	1	1800	0		10	1	0015	21545

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 04 25	119 05 15	NW29 21S 27E				MAY 50-DATE					

These flows are deliveries from Friant-Kern Canal into Tule River. Point of delivery is located on the Tule River approximately 4 miles west of Porterville where Friant-Kern Canal crosses the Tule River. Records furnished by U. S. Bureau of Reclamation.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03169	TULE RIVER BELOW PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0	0	192.0	182.0	175.0	372.0	148.0	0			1
2			0	0	148.0	209.0	184.0	244.0	152.0	0			2
3			0	0	141.0	209.0	204.0 *	182.0	144.0	1.2			3
4			0	0	141.0	209.0	174.0 *	169.0 *	140.0 *	0			4
5			0	0	141.0 *	202.0	174.0 *	191.0	136.0	0			5
6			0	0	129.0	206.0	178.0	178.0	136.0	0			6
7			0	0	123.0	185.0 *	178.0	165.0	132.0	0			7
8			6.0	0	141.0	195.0	178.0	136.0 *	123.0	0			8
9			32.0	0	161.0	188.0	178.0 *	136.0	119.0	0			9
10			70.0	0	185.0	206.0	169.0	148.0	123.0	0			10
11			103.0 *	87.0 *	206.0	206.0	157.0	169.0	128.0	0			11
12	N	N	132.0	144.0	206.0	178.0 *	169.0	174.0	140.0 *	0	N	N	12
13	O	O	123.0	158.0	182.0	182.0	341.0	174.0	144.0	0	O	O	13
14			0.6	178.0	137.0	195.0	532.0	169.0 *	144.0	0			14
15			0	182.0 *	151.0	202.0 *	510.0	157.0	136.0	0			15
	F	F									F	F	
16	L	L	0	161.0	144.0	206.0	516.0 *	161.0	132.0	0	L	L	16
17	O	O	0	165.0	144.0	202.0	521.0	165.0	132.0	0	O	O	17
18	W	W	0	237.0	144.0	202.0	516.0	165.0	140.0 *	0	W	W	18
19			0	338.0	144.0	202.0 *	494.0 *	169.0	144.0	0			19
20			0	230.0	141.0 *	209.0	488.0	169.0	148.0	0			20
21			0	206.0	165.0 *	165.0	494.0	152.0 *	152.0	0			21
22			0	209.0	182.0	154.0	499.0	148.0	140.0	0			22
23			0	202.0	202.0	154.0	454.0	152.0	144.0	0			23
24			0	206.0	199.0	158.0	477.0 *	152.0	148.0	0			24
25			0	213.0 *	199.0	165.0	488.0	148.0	128.0 *	0			25
26			0	213.0	192.0	168.0	488.0	144.0	59.1	0			26
27			0	223.0	195.0	165.0 *	477.0	144.0	9.7	0			27
28			0	227.0	202.0	165.0	477.0	144.0	0	0			28
29			0	206.0		165.0	471.0	144.0 *	0	0			29
30			0	216.0		168.0	477.0	140.0	0	0			30
31			0	206.0		175.0		132.0		0			31
MEAN			15.1	135.7	165.6	186.4	361.3	167.5	117.6	0			MEAN
MAX.			132.0	338.0	206.0	209.0	532.0	372.0	152.0	1.2			MAX.
MIN.			0	0	123.0	154.0	157.0	132.0	0	0			MIN.
AC. FT.			925	8345	9197	11459	21497	10300	6985	2			AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
94.9	532	2.77	4	14		0		10	1		68710

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 04 40	119 06 22	NW30 21S 27E	8850	9.27	12-7-66	FEB 57-DATE		1957	1959	0.00	LOCAL
								1959		-3.48	LOCAL

Station located 330 feet upstream from Rockford Road Bridge, 5.1 miles west of Porterville. Flows regulated by Success Reservoir and spill from Friant-Kern Canal. Altitude of gage is approximately 400 feet (from U. S. Geological Survey topographic map). Flows include Central Valley Project releases from Friant-Kern Canal to Tule River. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03970	CAMPBELL-MORELAND DITCH ABOVE PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	8.7		0	9.3	0		0	12.9	10.7	13.9	9.6	16.2	1
2	8.1 *		0	9.3 *	0		0	13.2	11.0	13.9	7.5	15.8	2
3	8.4		0	9.3	0		0	13.2	11.6	13.9	7.5	16.2 *	3
4	6.5		0	9.0	0		0	13.2	11.6 *	13.9	7.8	14.8	4
5	5.4		0	9.3	6.4 *		0	11.6	11.6	13.9	9.3	14.8	5
6	7.2		0.	10.0	10.0		0	10.7	11.6	13.5	11.0 *	14.5	6
7	6.8		6.6	10.4	10.4		0	10.7 *	11.0	13.5	10.7	14.5	7
8	7.5		11.3 *	10.0 *	10.4		0	11.0	11.0	13.5	11.0	11.3	8
9	6.5 *		10.4	9.6	10.4		0	11.3	11.3	13.5	11.3	10.0	9
10	6.8		10.4	9.6	5.4		0	11.3	11.3	13.2	11.6	10.0	10
11	6.5	N	12.5 *	10.0	0	N	0	11.0	11.9 *	13.2	11.3	10.0	11
12	4.4	O	14.3	10.0	0	O	0	10.7	11.9	12.9 E	12.2	10.0	12
13	5.7		12.9	10.4	0		0	9.6	11.9	12.9 E	13.5 *	10.0	13
14	5.7	F	10.4	10.4	0		0	9.6 *	11.9	12.9 E	13.2	10.0	14
15	6.0	L	10.7	10.4 *	4.6	F	0	9.6	11.6	12.9 E	14.5	9.6	15
		O				L							
16	6.0 *	W	10.7	6.7	9.0	O	0	9.6	11.6	12.9	15.8	10.0	16
17	5.7		10.7	0	9.0	W	0	9.3	11.9	10.7 *	16.2	10.0	17
18	6.2		10.4 *	0	9.3		0	9.3	11.3 *	12.2	16.2	8.7	18
19	4.0		10.4	0	9.6		7.0	9.3	11.0	14.2	16.2	8.1 *	19
20	0		10.0	0	9.6 *		11.9	13.2	11.0	14.8	16.2 *	8.1	20
21	0		10.0	0	9.6		12.2	13.5 *	11.9	15.2	16.2	7.8	21
22	0		10.0	0	3.2		12.2	11.6	12.2	14.8	15.8	7.8	22
23	0		9.6	0	0		11.9 *	11.6	12.2	14.8 *	15.5	7.8	23
24	0		9.3	0	0		12.2	11.6	12.2	14.5	15.5	6.5	24
25	0		9.6	0	0		11.9	11.6	12.9	13.9	15.5	5.7	25
26	0		10.4 *	0	0		11.9	11.6	13.9	13.2	15.5	5.4	26
27	0		11.3	0	0		11.9	11.6	14.2	12.9	15.2 *	5.4	27
28	0		10.4	0	0		11.9	11.3	13.9	12.5	15.5	5.4	28
29	0		9.6	0			12.5	11.0 *	14.2	11.9	15.5	5.4	29
30	0		9.3	0			12.9 *	11.0	14.2	11.9 *	15.5	5.4	30
31	0		9.3	0				11.0		11.9	15.8		31
MEAN	3.9		8.4	5.0	4.2		4.7	11.2	12.0	13.3	13.4	9.8	MEAN
MAX.	8.7		14.8	10.4	10.4		12.9	13.5	14.2	15.2	16.2	16.2	MAX.
MIN.	0		0	0	0		0	9.3	10.7	10.7	7.5	5.4	MIN.
AC. FT.	242		518	305	232		278	690	715	821	821	586	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
7.2	16.2	0.77	8	17		0		10	20		5208

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 02 48	118 56 54	NW 4 22S 28E				AUG 42-DATE			OCT 62	0.00	LOCAL
								OCT 62		-2.00	LOCAL

Station located 3.9 miles southeast of Porterville approximately 2,600 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

LE B-3 (Cont.)

MEAN DISCHARGE

IIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03182	PORTER SLOUGH AT PORTERVILLE

OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
			0	69.0	70.0	60.4	38.3	30.4	24.0	16.4	29.9	1
			0	63.0	73.0	29.9 *	37.0	30.4	23.6	16.0	29.4	2
			0	64.0	73.6	22.8	39.0	29.9	24.0	15.8	27.5	3
			0	68.0	74.6	27.0	36.2	29.4 *	24.8	15.4	25.8	4
			0	68.0 *	74.6 *	21.9	34.0	29.9	25.8	15.4	27.0 *	5
			0	71.0	76.4	27.0	32.8	29.9	28.0	15.4 *	27.0	6
			0	69.0	76.4	28.0	32.8 *	31.6	27.5	15.8	27.0	7
			0	66.0	76.4	29.4	31.6	29.9	21.0	15.8	27.0	8
			0	65.0	76.4	32.8 *	31.6	25.8	20.0	15.8	27.0	9
			0	69.0	79.0	31.6 *	31.6	25.8	19.4	15.4	21.9	10
N	N	N	0	69.0	79.0	48.0	31.0	22.8	18.6	15.4	15.4	11
O	O	O	0	58.6	73.6 *	90.2 *	31.0	20.0	18.2	15.4	11.4 *	12
			0	66.0	73.6	122.2 *	30.4	19.4 *	18.2	15.4	9.4	13
			0	71.0	74.6	146.0	29.9 *	19.4	17.8	15.8	12.1	14
F	F	F	0	73.0	74.6	142.0	30.4	19.4	27.5	15.4	11.8	15
L	L	L										
O	O	O	0	70.0	75.4	140.0 *	30.4	19.4	43.4	16.0	11.4	16
W	W	W	0	69.0	74.6	134.0	31.0	19.4	18.6 *	16.0	11.0	17
			32.0	71.0	74.6	136.0	31.0	19.4 *	17.4	16.4	10.6	18
			57.9	71.0	74.6 *	142.0	30.4	17.4	16.4	16.8	9.4 *	19
			54.0	71.0 *	80.8	136.0	31.0	14.9	16.8	16.4	9.8	20
			58.6	71.9	65.0	138.0	31.0 *	14.3	17.4	16.4 *	9.8	21
			60.4	73.0	50.6	132.0	31.0	13.0	16.8	16.4	5.4	22
			64.0	74.6	51.4	127.0 *	30.4	13.0	17.4 *	20.4	1.7	23
			64.0	73.6	53.0	152.0	31.0	13.0	18.2	24.4	1.1	24
			66.0 *	71.9	56.0	154.0	30.4	13.4 *	18.6	26.2	0.5	25
			69.0	71.0 *	57.9 *	154.0	29.9	12.4	18.2	27.5	0	26
			68.0 *	71.9	57.0	79.0 *	29.9	15.8	17.8	27.5 *	0	27
			68.0	71.9	57.9	51.4	31.6	18.2	17.4	29.4	0	28
			70.0		57.9	49.6	31.6 *	23.4	17.4	29.4	0	29
			69.0		59.4	49.6 *	31.0	24.8	17.4	29.4	0	30
			71.9		60.4		31.0		17.8 *	29.4		31
			28.2	69.3	68.8	87.8	31.9	21.5	20.8	19.1	13.3	MEAN
			71.9	74.6	80.8	154.0	39.0	31.6	43.4	29.4	29.9	MAX.
			0	58.6	50.6	21.9	29.9	12.4	16.4	15.4	0	MIN.
			1731	3851	4229	5224	1964	1281	1280	1175	794	AC.FT.

ATED
ECORD
ARGE MEASUREMENT OR
RVATION OF NO FLOW
1 *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
29.7	154	4.09	4	25		0		10	1		21529

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
TITUDE	LONGITUDE	1/4 SEC T. & R. M.D.B.&M	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
03 29	118 59 08	SE31 21S 28E				JAN 42-DATE		1957		0.00	LOCAL

ation located at "B" Lane Bridge, immediately east of Porterville. This is regulated diversion from Tule River.
citude of gage is approximately 465 feet (from U. S. Geological Survey topographic map). Records furnished by the
le River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03984	PORTER SLOUGH DITCH AT PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1						3.3	5.2	10.8	9.8	10.8	8.8	17.4	1
2						5.8	4.8	11.4	10.6	10.6	8.6	16.8	2
2						5.9	4.8	11.4	11.8	10.2	8.2	16.4	3
4						5.5	5.9	10.9	14.9 *	11.1	7.9	16.1	4
5						4.9	6.6	10.2	16.2	11.4	7.7	16.4 *	5
6						5.4	7.1	10.1	16.3	11.5	7.7 *	16.1	6
7						4.8	7.4	10.2 *	16.9	12.9	7.8	15.2	7
8						4.4	7.6	10.0	17.0	10.1	7.7	13.9	8
9						4.4	7.9	10.5	16.4	10.0	7.6	13.4	9
10						4.3	7.9	10.4	16.4	9.1	7.7	11.5	10
11						4.0	8.2	10.0	15.6	8.9	7.6	7.7	11
12	N	N	N	N	N	3.4	8.1	10.0	13.9 *	9.0	7.6	6.7 *	12
13	O	O	O	O	O	1.1	7.6	5.4	13.8	9.1	7.5 *	6.4	13
14						0	6.6	0	13.3	9.3	7.8	6.2	14
15						0	5.8	0	12.8	11.1	7.6	5.7 E	15
16	F	F	F	F	F	0	5.7	0	12.4	16.1	7.6	5.2 E	16
17	L	L	L	L	L	4.4	5.7	2.4	12.0	12.0 *	8.2	4.7	17
18	O	O	O	O	O	6.4	7.6	5.8	11.9 *	10.6	8.9	4.5	18
19	W	W	W	W	W	6.4	11.2	6.1	12.0	9.9	9.0	4.0 *	19
20						6.8	11.4	5.9	10.3	10.2	9.3	3.9	20
21						5.6	12.4	5.9 *	9.8	10.9	9.8 *	3.8	21
22						5.6	13.1	5.9	8.6	8.9	9.9	3.4	22
23						5.9	13.7	5.9	7.6	7.8 *	11.4 *	1.7	23
24						5.7	14.2	5.9	7.2	9.5	14.4	1.0	24
25						5.6	13.8	6.0	6.8 *	9.1	15.8	0.9	25
26						5.6	13.6	6.0	6.2	8.6	17.0	0.9	26
27						5.5	12.5	6.1	7.3	8.4	16.8 *	0.9	27
28						5.5	11.6	6.2	8.6	8.6	15.9	0.9	28
29						5.4	10.8	6.4 *	11.3	8.6	17.1	0.9	29
30						5.3	10.5	6.4	11.4	8.7	17.5	0.9	30
31						5.2		7.6		8.6	17.3		31
MEAN						4.6	9.0	7.1	12.0	10.1	10.4	7.4	MEAN
MAX.						6.8	14.2	11.4	17.0	16.1	17.5	17.4	MAX.
MIN.						0	4.8	0	6.2	7.8	7.5	0.9	MIN.
AC. FT.						282	534	436	712	618	642	443	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
5.1	17.5	2.73	8	30		0		10	1		3667

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 04 06	119 01 06	SE26 21S 27E				JAN 43-DATE		1943		0.00	LOCAL

Station located in Porterville 0.5 mile west of Porterville Post Office, approximately 150 feet downstream from head. This is regulated diversion from Tule River via Porter Slough. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03965	VANDALIA DITCH NEAR PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0	0	0.4	4.9	4.6		0	5.3	6.9	5.3	1
2			0	0	0.4	4.9	3.7 *		0	5.3	7.3	5.2	2
3			0	0	0.4	4.9	3.2		0	5.4	7.3	4.9 *	3
4			0	0	0.4	4.9	3.9		0	5.7	7.3	5.0	4
5			0	0	4.6 *	4.9 *	4.8		3.0	5.7	7.3	5.0	5
6			0	0	7.1	4.9	4.8		4.8 *	5.6	7.5 *	5.0	6
7			2.0	0	6.9	4.8	4.8		4.4	5.7	7.6	5.0	7
8			3.9 *	0	6.1	4.8	4.7		4.0	5.7	7.5	5.4	8
9			3.6	2.9	5.4	4.8	4.7 *		4.1	5.7	6.9	5.6	9
10			3.8	6.7 *	3.2	4.8	4.9		4.4	5.7 E	6.9	5.6	10
11			2.0	6.1	0.4	4.8	5.6		4.4 *	5.7 E	6.9	5.7	11
12	N	N	0.2 *	5.3	0.4	4.7 *	5.8	N	4.7	5.8 E	6.7	3.1	12
13	O	O	0.1	5.4	0.3	4.8	6.1	O	4.8	5.8 E	6.6 *	0.7	13
14			0	5.4	0.3	4.8	5.9		4.8	5.9 E	6.6	0.7	14
15	F	F	0	5.2 *	2.4	4.8	5.8	F	4.8	5.9 E	6.4	0.7	15
	L	L						L					
16	O	O	0	5.2	4.8	4.9	5.6 *	O	4.8	6.2 E	6.9	0.7	16
17	W	W	0	5.3	4.7	4.9	5.4	W	4.9	5.9 *	6.6	0.7	17
18			0	3.8	4.8	4.9	5.6		4.9 *	5.7	6.2	0.7	18
19			0	0.5	4.8	4.8 *	2.4		4.8	5.6	6.1	0.7	19
20			0	0.5	4.9 *	4.8	0		4.7	6.1	5.9 *	0.7	20
21			0	0.5	4.9	4.7	0		5.3	6.4	5.9	0.7	21
22			0	0.5	5.0	4.7	0		5.7	6.4	5.9	0.7	22
23			0	0.4	5.0	4.7	0		5.7	10.2 *	5.8	0.7	33
24			0	0.5	5.0	4.7	0		5.7	12.3	5.8	0.6	34
25			0	0.4	4.9	4.8	0		7.5	8.2	5.9	0.7	25
26			0	0.4 *	4.9 *	4.7 *	0		5.9	8.2	5.7	0.7	26
27			0	0.4	4.9	4.8	0		4.7	8.5	5.6 *	0.7	27
28			0	0.4	4.9	4.8	0		5.2	8.0	5.6	0.7	28
29			0	0.4		4.9	0		5.2	7.8	5.6	0.7	29
30			0	0.4		4.8	0		5.3	7.6 *	5.2	0.7	30
31			0	0.4		4.8				7.5	5.3		31
MEAN			0.5	1.8	3.6	4.8	3.1		4.3	6.6	6.4	2.4	MEAN
MAX.			3.9	6.7	7.1	4.9	6.1		7.5	12.3	7.6	5.7	MAX.
MIN.			0	0	0.3	4.7	0		0	5.3	5.2	0.6	MIN.
AC. FT.			31	113	203	296	183		255	408	396	145	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
2.8	12.3	1.71	7	24		0		10	1		2030

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1 4 SEC T. & R. M.D B &M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 03 00	118 58 18	NE 5 22S 28E				1948-DATE		1948		0.00	LOCAL

Station located 2.8 miles southeast of Porterville approximately 1,000 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03960	POPLAR DITCH NEAR PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1			0	0	66.4	71.0	67.4	56.8	66.9	111.0	134.8	131.0
2			0	0	68.9	73.2	42.9 *	19.1	66.9	111.8	134.2	128.0
3			0	0	69.4	73.8	29.8	19.8	69.4	119.6	134.8	129.2 *
4			0	0	68.9	73.8	29.8	19.1	68.9 *	125.6	134.2	130.4
5			0	0	68.9 *	76.0 *	33.4	60.1	68.9	128.6	132.8	132.8
6			10.6	0	68.9	77.8	38.2	85.6	68.4	131.0	132.8 *	132.8
7			24.8	0	68.4	77.2	37.0	90.8 *	43.9	132.2	133.4	132.2
8			18.6 *	0	68.4	77.2	37.0	90.2	27.7	135.4	133.4	132.2
9			18.9	0	70.5	73.2	38.6 *	86.8	27.7	134.8	133.4	133.4
10			19.4	28.0 *	72.6	67.4	43.9	84.6	28.0	134.8	132.2	133.4
11	N	N	19.1	54.0	73.8	63.8	77.2	84.6	28.3 *	134.8	131.6	135.4 *
12	O	O	18.9	55.0	73.8	62.7 *	95.0 *	83.6	28.6	134.8	132.2	130.4
13			18.1	55.0	76.6	62.7	116.2	77.8	29.0	134.8	132.8 *	123.8
14			4.5	52.8	78.4	66.4	120.2	73.2 *	29.4	135.4	133.4	123.2
15	F	F	0	52.8 *	77.2	66.9	120.2	73.2	29.4	134.8	132.2	123.8
	L	L										
16	O	O	0	54.0	77.2	66.9	123.8 *	73.2	30.2	132.2	133.4	129.2
17	W	W	0	54.5	78.4	68.4	126.8	73.2	31.0	46.7	135.4	134.2
18			0	56.5	78.4	69.4	126.8	77.2	31.0 *	0	135.4	132.2 *
19			0	55.0	77.8	70.0 *	126.8	80.0	30.2	0	134.8	128.6
20			0	54.0	76.6 *	70.0	126.2	83.6	31.0	88.9 *	133.4 *	124.4
21			0	54.0	74.4	68.4	123.0	77.2 *	52.8	129.8	132.8	113.2
22			0	54.0	73.2	68.4	123.2	74.4	76.6	129.8	132.2	103.3
23			0	54.0	75.0	67.9	125.0 *	71.5	79.5	129.2 *	131.0	95.6
24			0	56.0	72.6	67.9	131.0	71.5	83.0	129.2	129.2	87.9
25			0	58.0	71.0	67.9	131.6	72.1	81.1 *	130.4	127.4	90.2 *
26			0	57.5	72.1 *	66.9 *	131.6	72.6	84.1	131.0	125.6	97.6
27			0	58.0	71.5	66.4	131.6	73.8	104.6	131.0	125.0 *	101.4
28			0	58.9	71.0	66.4	133.4	73.8	115.0	132.2	129.2	100.0
29			0	59.4 *		66.4	132.2	73.8 *	113.2	133.4	132.2	99.4
30			0	59.4		66.9	131.6	71.5	109.0	134.8 *	131.6	101.4 E
31			0	60.8		66.9		68.4		134.8	132.2	
MEAN			4.9	38.8	72.9	69.2	95.0	70.7	57.8	117.8	132.2	119.7
MAX.			24.8	60.8	78.4	77.8	133.4	90.8	115.0	135.4	135.4	135.4
MIN.			0	0	66.4	62.7	29.8	19.1	27.7	0	125.0	87.9
AC. FT.			303	2383	4047	4261	5656	4350	3439	7245	8130	7122

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
64.8	135.4	3.54	7	8		0		10	1		46936

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 03 18	119 00 54	SW36 21S 27E				APR 42-DATE		1942		0.00	LOCAL

Station located 1.0 mile south of Porterville approximately 4,750 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03925	HUBBS-MINER DITCH AT PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1						1.9	6.4	9.9	6.3	10.8	6.8	5.8	1
2						7.0 *	5.5 *	9.6	7.0	10.6	0.6	5.6	2
3						6.5	1.0	8.7	6.9	10.6	0	5.5 *	3
4						6.4	0	7.9	6.7 *	10.6	0	5.5	4
5						6.2 *	0	5.2	7.4	10.6	0	5.6	5
6						6.4	0	2.5	8.4	10.8	4.8	5.7	6
7						6.1	0	2.6 *	7.9	11.1	7.3	5.7	7
8						6.3	0	4.0	7.5	11.4	7.5	5.7	8
9						6.3	0	3.6	7.5	11.4	8.0	5.7	9
10						6.6	0	3.7	7.6	11.4	8.0	5.8	10
11	N	N	N	N	N	6.5	0	2.4	7.2 *	11.4	7.3	6.0	11
12	O	O	O	O	O	6.1 *	3.4	1.9	7.7	11.4	5.9	5.7	12
13						6.1	7.6	1.7	8.0	10.3	7.4 *	5.5	13
14						6.4	7.7	4.7 *	8.0	8.0	8.6	5.2	14
15	F	F	F	F	F	6.4	8.2	6.9	6.3	7.8	8.7	5.1	15
	L	L	L	L	L								
16	O	O	O	O	O	6.1	8.2 *	6.7	3.7	8.4	7.2	4.9	16
17	W	W	W	W	W	6.3	8.3	6.6	3.9	7.7 *	6.2	2.6	17
18						6.4	8.8	6.4	3.6 *	10.8	6.0	0.4	18
19						6.6 *	9.7	5.8	6.0	14.0	5.7	0	19
20						6.9	10.0	6.2	8.2	12.9	5.6 *	0	20
21						6.4	9.5	6.6 *	8.4	7.4	5.5	0	21
22						6.3	11.3	5.4	7.9	3.2	5.2	0	22
23						6.4	11.3 *	5.0	7.6	0.6	5.2	0	23
24						6.4	10.3	4.7	7.3	0	5.1	0	24
25						6.4	10.8	4.1	7.7 *	3.0	5.0	0	25
26						6.3 *	9.9	4.1	7.9	8.2	5.0	0	26
27						6.1	8.2	4.0	8.3	10.3	5.5 *	0	27
28						6.2	8.3	3.9	8.3	10.2	5.9	0	28
29						6.2	8.2	3.5 *	9.0	10.6	5.9	0	29
30						6.2	9.4 *	5.0	10.8	10.2	5.9	0	30
31						6.2		6.4		9.4 *	5.8		31
MEAN						6.2	6.1	5.2	7.3	9.2	5.5	3.1	MEAN
MAX.						7.0	11.3	9.9	10.8	14.0	8.7	6.0	MAX.
MIN.						1.9	0	1.7	3.4	0	0	0	MIN.
AC. FT.						382	361	317	435	565	340	182	AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
3.6	14.0	1.90	7	19		0		10	1		2582

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 03 27	119 02 02	NW35 21S 27E				DEC 42-DATE		1942		0.00	LOCAL

Station located 1.1 miles southwest of Porterville, approximately 3,400 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C03948	WOODS-CENTRAL DITCH NEAR PORTERVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1			0	0	71.3	40.5	47.2	166.0	0	194.0	212.0	192.0	1
2			0	0	75.5	43.5	46.1 a	166.0	0	181.0	213.0	197.0	2
3			0	0	72.3	46.1	49.9 b	165.0	0	176.0	215.0	187.0 *	3
4			0	0	65.9	48.3	53.6 b	156.0	0	177.0	214.0	186.0	4
5			0	0	64.8	48.3	53.6 b	118.5	0	184.0	215.0	188.0	5
6			0	0	63.8	49.3	54.2 b	102.0	0	181.0	210.0 *	188.0	6
7			0	0	60.6	45.6	53.6 b	29.6	0	183.0	216.0	186.0	7
8			19.1	0	57.4	46.1	53.1 b	0	0	192.0	215.0	186.0	8
9			49.3	0	57.4	44.0	59.0 b	0	0	192.0 *	212.0	189.0	9
10			42.5	0	59.0	45.1	61.6 b	0	0	189.0	211.0	193.0	10
11			41.5	29.8	59.0	44.5	63.2	0	0	179.0	211.0	201.0	11
12	N	N	39.0	47.7	57.4	45.6	90.0	0	0	176.0	211.0	202.0	12
13	O	O	28.6	46.1	60.0	45.6	123.0	0	0	180.0	210.0	192.0	13
14			0	47.2	62.7	49.9	128.0	0	0	186.0	212.0	175.0	14
15	F	F	0	44.0	60.0	55.8	118.0	0	0	179.0	209.0	174.0	15
	L	L											
16	O	O	0	52.0	53.6	50.9	124.0	0	0	159.0	205.0	169.0	16
17	W	W	0	57.9	52.0	45.1	118.0	0	0	186.0	214.0	167.0	17
18			0	61.1	50.4	45.6	127.0	0	0	196.0 *	216.0	167.0	18
19			0	57.9	55.2	46.7	147.0	0	0	183.0	215.0	160.0 *	19
20			0	52.0	60.0	53.6	145.0	0	0	174.0	217.0 *	161.0	20
21			0	53.6	46.7	48.8	142.0	0	0	183.0	217.0	161.0	21
22			0	57.9	52.6	48.3	141.0	0	0	189.0	213.0	161.0	22
23			0	61.6	55.6	48.8	132.0	0	0	191.0 *	206.0	157.0	23
24			0	63.8	46.0	49.3	141.0	0	0	182.0	189.0	81.0	24
25			0	64.1	41.0	49.9	150.0	0	0	191.0	187.0	0	25
26			0	65.9	48.8	51.5	158.0	0	135.8 *	192.0	186.0	0	26
27			0	49.9	43.0	48.8	165.0	0	187.0	194.0	184.0 *	0	27
28			0	45.6	42.0	48.3	171.0	0	188.0	205.0	179.0	0	28
29			0	70.2		47.7	171.0	0	192.0	209.0	173.0	0	29
30			0	64.8		48.3	171.0	0	200.0	208.0 *	171.0	0	30
31			0	68.6		47.7		0		209.0	173.0		31
MEAN			7.1	37.5	56.9	47.7	108.7	29.1	30.1	187.1	204.2	140.6	MEAN
MAX.			49.3	70.2	75.5	55.8	171.0	166.0	200.0	209.0	217.0	202.0	MAX.
MIN.			0	0	41.0	40.5	46.1	0	0	159.0	171.0	0	MIN.
AC. FT.			436	2304	3162	2931	6470	1791	1791	11504	12557	8370	AC. FT.

E – ESTIMATED
NR – NO RECORD
* – DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
\# – E AND *
a - Includes CVP Water
b - All CVP Water

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET
70.9	217	7.81	8	20		0		10	1		51316

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC T & R M.D B &M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 04 18	119 05 48	SE30 21S 27E				DEC 42-DATE		1942		0.00	LOCAL

Station located 4.5 miles west of Porterville, approximately 100 feet downstream from head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association. Records furnished by the Tule River Association and reviewed by the Department of Water Resources. This station is sometimes affected by backwater due to CVP water being delivered from the Friant-Kern Canal to Woods-Central Ditch approximately 100 feet downstream from station.

BLE B-3 (Cont.)

MEAN DISCHARGE

IBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C05150	KERN RIVER NEAR BAKERSFIELD

OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
186	158	256	257	429	473	559	1390	1010	2840	2290	871	1
183	160	267	259	427	485	577	1410	1940	2740	2160	890	2
151	163	262	252	426	509	692	1450	2100	2690	2140	850	3
166	162	262	249	433	595	858	1430	2150	2640	2080	862	4
174	168	277	255	409	648	923	1360	2010	2580	2030	892	5
135	166	286	251	358	683	966	1360	1900	2570	2020	922	6
160	159	289	253	349	665	992	1390	2000	2580	1950	939	7
161	161	293	246	383	658	995	1390	2310	2600	1880	944	8
169	172	290	238	412	652	1040	1400	2440	2670	1830	942	9
171	184	284	263	441	587	1070	1360	2450	2680	1720	960	10
166	169	285	275	450	566	1070	1350	2480	2700	1610	966	11
160	167	272	289	506	553	1080	1360	2490	2720	1570	950	12
158	171	269	281	594	627	1140	1370	2520	2740	1630	918	13
161	174	267	287	562	710	1110	1410	2580	2740	1730	875	14
164	179	267	282	566	722	1200	1400	2610	2680	1850	840	15
149	192	265	278	547	718	1170	1590	2570	2680	1830	766	16
178	236	271	288	532	707	1220	1700	2520	2740	1100	789	17
418	255	270	309	526	699	1250	1780	2530	2740	1800	743	18
182	249	263	623	522	683	1240	1830	2520	2280	1790	737	19
134	249	264	474	511	696	1140	1880	2500	1770	1760	717	20
139	257	264	401	505	651	1070	1910	2520 *	2620	1720	706	21
141	256	269	410	476	616	1090	1920	2560	2650	1690	669	22
145	256	261	406	480	694	1180	1940	2570	2560	1670	649	23
153	252	257	474	472	668	1350	1920	2590	2530	1600	644	24
155	261	259	462	469	677	1440	1820	2560	2550	1440	640	25
156	259	262	453	476	684	1440	1740	2710	2580	1320	661	26
152	264	260	459	474	672	1430	1570	2740	2630	1240	681	27
157	266	258	455	481	596	1430	1320	2760	2680	1170	684	28
153	268	258	451		589	1410	1460	2870	2730	1100	710	29
156	249	263	448		565	1410	1800	2860	2720	1060	724	30
153		261	439		553		1970		2540	977		31
167	209	269	347	472	632	1118	1580	2412	2618	1670	805	MEAN
418	268	293	623	594	722	1440	1940	2870	2840	2290	966	MAX.
134	158	256	238	349	473	559	1320	1010	1770	977	640	MIN.
10290	12460	16520	21360	26210	38880	66530	97150	143500	161000	102700	47880	AC. FT.

MATED
RECORD
HARGE MEASUREMENT OR
ERVATION OF NO FLOW
D *

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT.	MINIMUM MO.	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE FEET
1028	2870		6	29		134		10	20		744500

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
ATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
5 25 9	118 56 8	SW 2 29S 28E	36000 9290a	461.37 454.94	11-19-50 12-6-66	1893-DATE				0.0 0.0	Mean sea level

lso known as "Kern River at First Point". Station located 5.8 miles northeast of Bakersfield. Tabulated discharge s the regulated flow and is computed from noon to noon beginning at noon of day shown. Records furnished by Kern ounty Canal and Water Company. Drainage area is 2,407 square miles.

aximum flow since construction of Isabella Dam in 1954.

TABLE B-3 (Cont.)

DAILY MEAN DISCHARGE

(IN CUBIC FEET PER SECOND)

WATER YEAR	STATION NO.	STATION NAME
1973	C07120	BUENA VISTA CREEK NEAR TAFT

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
2													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15					INSUFFICIENT DATA TO PUBLISH								15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN													MEAN
MAX.													MAX.
MIN.													MIN.
AC. FT.													AC. FT.

E — ESTIMATED
NR — NO RECORD
* — DISCHARGE MEASUREMENT OR OBSERVATION OF NO FLOW
# — E AND *

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE FEET

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
35 12 21	119 24 35	NW28 31S 24E		2.9	8-14-65		NOV 64-DATE	1964		0.00	LOCAL

Station located at State Highway 119 bridge immediately southwest of Valley Acres, 5.7 miles northeast of Taft. Tributary to Buena Vista Lake. Recorder installed 11-10-64. Altitude of gage is approximately 425 feet (from topographic map).

DIVERSIONS

Diversion data formerly collected by the Department of Water Resources for the Stanislaus, Tuolumne, Merced, and San Joaquin Rivers and Dry Creek near Modesto have been discontinued. The last publication of such diversion data was in Bulletin 130-70.

The diversion data shown in Tables B-4 through B-8 have been furnished by the U. S. Bureau of Reclamation, City and County of San Francisco, local agencies including irrigation and water districts, and the Department's Division of Operations and Maintenance. Figures shown are monthly and annual acre-feet amounts of water diverted from the San Joaquin River, deliveries from project canals, deliveries to irrigation districts, and imports to and exports from the San Joaquin Valley.

The diversion data are published as received without rounding according to criteria normally used by the Department.

TABLE B-4

DIVERSIONS - SAN JOAQUIN RIVER
(Fremont Ford Bridge to Gravelly Ford)
October 1972 through September 1973

WATER USER	MILE AND BANK ABOVE MOUTH	NUMBER AND SIZE OF PUMP IN INCHES	MONTHLY DIVERSION IN ACRE - FEET												TOTAL DIVERSION OCT.-SEPT. ACRE-FEET
			OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
--GAGING STATION - SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE--	129.5														
--GAGING STATION - SAN JOAQUIN RIVER NEAR STEVINSON	136.7														
--GAGING STATION - SAN JOAQUIN RIVER NEAR DOS PALOS	186.0														
San Luis Canal Company	186.6 L	Gravity	8931	1081	0	0	0	920	16739	19962	24643	28667	27312	18379	146634
--FIREBAUGH BRIDGE--	198.4														
--GAGING STATION - SAN JOAQUIN RIVER NEAR MENDOTA--															
--MENDOTA DAM--	208.63														
Central California Irrigation District	208.8 L	Gravity	18571	1482	430	0	1478	3422	49282	72917	75351	86296	82279	42802	a 434310
--FRESNO SLOUGH-- b	209.0 L														
--DELTA MENDOTA CANAL-- b	(0.2L)														
Firebaugh Canal Company b	(0.4L)		2856	793	0	0	198	718	5937	4689	4649	6851	6669	3626	c 36986
Producers Cotton Oil Company b	(3.4L)		0	0	0	0	0	0	454	623	270	489	162	4	2002
State of California Mendota Waterfowl Management b	(6.45-8.20)		4451	2362	662	0	0	0	0	746	2103	2418	3356	4735	20833
Fresno Slough Water District b	(9.20-10.50)		0	0	0	0	0	0	676	510	726	1004	1041	258	4215
--JAMES BYPASS--	(11.80R)														
Mason A. Loundy	(0.75)		0	0	0	0	0	0	518	432	421	545	708	696	3320
Reclamation District 1606 d	(1.50)		0	0	0	0	0	0	24	63	60	107	79	0	333
James Irrigation District d	(4.4)		230	0	0	0	210	276	6950	6750	8234	9015	8642	1656	41963
Tranquillity Irrigation District b	(12.00-13.75)		204	0	0	0	0	674	4661	3318	6605	7162	6581	821	30026
Melvin D. Hughes b	(12.20)		0	0	0	0	0	0	12	0	10	24	18	0	64
--LONE WILLOW SLOUGH--	219.8 R														
Columbia Canal Company	219.8 R		2805	490	0	0	355	1628	6867	7200	8422	9406	9402	6893	53468
State Center Land Company		e 1-6	101	169	20	0	0	0	0	0	0	0	0	0	290
M. Beck		f 1-8	0	20	0	0	0	0	0	0	0	0	0	0	20
Tulle Gun Club		g 1-8	0	0	0	0	0	0	0	0	0	18	0	0	18
Westlands Water District			97	179	0	0	0	488	4155	2622	4187	4425	3132	668	h 19953
Grasslands Water District			18341	1347	0	0	0	0	0	0	0	0	0	8747	28435
J. W. Wilson			0	0	0	0	0	0	117	0	143	210	133	0	603
Laguna Water District			0	0	0	0	0	0	0	0	99	151	149	0	399
Tranquillity Gun Club			80	0	0	0	0	0	0	0	0	0	0	0	80
Pacheco Water District			0	0	0	0	0	0	0	0	1999	3201	1700	599	7499
Mercy Springs Water District			0	0	0	0	0	0	0	0	0	1500	1000	0	2500
--GAGING STATION - SAN JOAQUIN RIVER AT WHITE HOUSE--	219.83														
--GRAVELLY FORD CANAL--	232.8 R														
FREMONT FORD BRIDGE TO GRAVELLY FORD															
Total			56667	7923	1112	0	2241	8126	96392	119832	137922	161489	152363	89884	833951
Average cubic feet per second			922	133	18	0	36	132	1620	1949	2318	2626	2478	1510	1152
Monthly use in percent of seasonal			6.8	0.9	0.1	0	0.2	1.0	11.6	14.4	16.5	19.4	18.3	10.8	

Records for this reach furnished by the U. S. Bureau of Reclamation and the Contracting Entities, and include operational spill.
Acre-feet values are published as received and not rounded to the criteria used by the Department of Water Resources.

a Total does not include Central California Irrigation District deliveries from the Delta-Mendota Canal.
b Plant is located on Fresno Slough which diverts from the San Joaquin River at mile 209.0L. Distance from the San Joaquin River and bank of slough on which diversion is located are shown in parentheses.
c Total does not include Firebaugh Canal Company deliveries from the Delta-Mendota Canal.
d Plant is located on James Bypass which diverts from Fresno Slough at mile 11.80R. Distance from Fresno Slough and bank locations of diversions are shown in parentheses.
e One 6-inch pump located on arm of slough at SW corner S. 12, T. 14S, R. 15E.
f One 8-inch pump located on arm of slough 1400 feet S. of NE corner, S. 24, T. 14S, R. 15E.
g One 8-inch pump located on arm of slough adjacent to M. Beck.
h Total does not include deliveries under separate agreement by San Luis Water District.

TABLE B-5

DIVERSIONS AND ACREAGE IRRIGATED - EAST SIDE CANALS AND IRRIGATION DISTRICTS
October 1972 through September 1973

WATER USER	DIVERSION													ACREAGE IRRIGATED	
	OCT.	NOV.	DEC.	JAN.	FEB	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT	TOTAL	GENERAL	RICE
Friant-Kern Canal				San Joaquin River[a]											
Total acre-feet diverted	21148	1402	0	0	106038	103102	158142	221583	214712	210592	203331	130473	1370523	Not Available	
Average cubic feet per second	344	24	0	0	1909	1677	2658	3604	3606	3425	3307	2193	1893		
Monthly use in percent of seasonal	1.6	0.1	0	0	7.7	7.5	11.5	16.2	15.7	15.4	14.8	9.5			
Madera Canal															
Total acre-feet diverted	0	859	0	0	2067	12601	41438	54699	69303	79526	66882	19956	347271	Not Available	
Average cubic feet per second	0	14	0	0	37	205	696	890	1165	1293	1087	335	480		
Monthly use in percent of seasonal	0	0.3	0	0	0.6	3.6	11.9	15.8	20.0	22.9	19.2	5.7			
Merced Irrigation District				Merced River											
Main Canal	3328	3249	3519	3576	3439	3907	53164	107470	106696	113563	102362	65985	b 570258	c 107362	6785
Northside Canal	629	446	135	83	6	0	2087	4747	4715	4786	4124	2910	24668		
Total acre-feet diverted	3957	3695	3654	3659	3445	3907	55251	112217	111411	118349	106486	68895	594926		
Average cubic feet per second	64	62	59	60	62	64	929	1825	1872	1925	1732	1158	822		
Monthly use in percent of seasonal	0.7	0.6	0.6	0.6	0.6	0.6	9.3	18.9	18.7	19.9	17.9	11.6			
Turlock Irrigation District				Tuolumne River											
Total acre-feet diverted	31820	17230	5890	4540	261	167	46710	85850	103800	125000	93430	72460	d 587200	e 170635	0
Average cubic feet per second	517	290	96	74	5	3	785	1396	1744	2033	1519	1218	811		
Monthly use in percent of seasonal	5.4	2.9	1.0	0.8	0.1	0.0	8.0	14.6	17.7	21.3	15.9	12.3			
Modesto Irrigation District															
Total acre-feet diverted	15103	11830	9360	0	3	4120	30006	53148	52391	50765	51986	21620	f 300332	g 62168	0
Average cubic feet per second	246	199	152	0	0	67	504	864	880	826	845	363	415		
Monthly use in percent of seasonal	5.0	4.0	3.1	0	0	1.4	10.0	17.7	17.4	16.9	17.3	7.2			
Waterford Irrigation District															
Total acre-feet diverted	1547	0	0	0	0	0	4334	7182	7419	8025	6664	5130	h 40301	i 7390	0
Average cubic feet per second	25	0	0	0	0	0	73	117	125	131	108	86	56		
Monthly use in percent of seasonal	3.8	0	0	0	0	0	10.8	17.8	18.4	19.9	16.6	12.7			
Oakdale Irrigation District				Stanislaus River											
Northside Canal	1534	0	0	0	0	562	11512	23260	22604	22474	20446	16310	118702	j 19704	4190
Southside Canal	2176	0	0	0	0	596	18309	31541	30411	30858	27678	23822	165391	k 34261	736
Total acre-feet diverted	3710	0	0	0	0	1158	29821	54801	53015	53332	48124	40132	284093	m 53965	4926
Average cubic feet per second	60	0	0	0	0	19	501	891	891	867	783	674	392		
Monthly use in percent of seasonal	1.3	0	0	0	0	0.4	10.5	19.3	18.7	18.8	16.9	14.1			
South San Joaquin Irrigation District															
Total acre-feet diverted	2032	0	0	0	298	5028	30632	39090	45701	52397	50425	32414	258017	n 65151	230
Average cubic feet per second	33	0	0	0	5	82	515	636	768	852	820	545	356		
Monthly use in percent of seasonal	0.8	0	0	0	0.1	1.9	11.9	15.2	17.7	20.3	19.5	12.6			

a Data for Madera and Friant-Kern Canals furnished by U. S. Bureau of Reclamation. All other data furnished by individual irrigation districts and published as received.
b An additional 50,387 acre-feet of water was pumped from wells.
c Of this acreage, 1,858 were double cropped. Does not include an undetermined amount of riparian water users acreage.
d An additional 125,316 acre-feet of water was pumped from wells.
e Of this acreage, 30,160 were double cropped.
f An additional 32,186 acre-feet of water was pumped from wells.
g Of this acreage, 8,939 were double cropped.
h An additional 580 acre-feet of water was pumped from wells.
i Of this acreage, 396 were double cropped.
j Of this acreage, 854 were double cropped.
k Of this acreage, 573 were double cropped.
m This acreage also received 32,618 acre-feet of water from wells and controlled drainage.
n This acreage also received an undetermined amount of well water, and an undetermined amount of controlled drainage water from Oakdale Irrigation District. Of this acreage, 4,181 were double cropped.

TABLE B-6

DELIVERIES FROM CENTRAL VALLEY PROJECT CANALS
October 1972 through September 1973

WATER USER	MILE POST FROM CANAL HEAD FROM	MILE POST FROM CANAL HEAD TO	MONTHLY DELIVERIES IN ACRE-FEET OCT.	NOV	DEC.	JAN	FEB	MAR.	APR	MAY	JUNE	JULY	AUG.	SEPT	TOTAL
								Delta-Mendota Canal							
Plain View Water District	4.22	20.96	374	28	0	2	2	14	731	3278	3649	3899	3752	2139	17868
The Westside Irrigation District	14.79		0	0	0	0	0	0	0	1338	789	1215	987	0	4329
Hospital Water District	18.05	30.96	621	39	0	1	3	2	2153	5375	5161	5448	4275	1990	25068
Banta-Carbona Irrigation District	20.42		20	0	0	0	0	0	311	3102	1698	3670	2414	0	11215
Kern Canon Water District	31.31	35.18	32	0	0	0	1	0	669	1371	1897	1426	1215	659	7270
West Stanislaus Irrigation District	31.31	38.14	0	0	0	0	0	1	980	5925	6872	9793	7516	325	31412
Del Puerto Water District	35.73	42.51	259	1	0	0	1	8	1332	2924	3346	3842	2964	2041	16718
Salado Water District	42.10	46.85	86	0	0	0	0	0	1215	2317	1942	2040	1858	337	9795
Patterson Water District	42.51		54	0	0	22	27	83	1048	1303	1348	889	1268	189	6231
Sunflower Water District	44.22	52.02	250	2	0	0	0	31	1664	3067	2711	3206	2658	1210	14799
Orestimba Water District	46.83	51.41	64	0	0	0	0	1	2552	2818	2341	3297	3023	530	14626
Foothill Water District	51.65	57.46	434	0	0	1	2	2	805	1739	1915	1815	1325	994	9032
Davis Water District	53.64	56.82	0	0	0	0	0	0	336	758	695	860	487	511	3647
Mustang Water District	56.80	62.67	54	0	0	0	0	0	847	2851	2147	2914	2506	1430	12749
Central California Irrigation District	58.26	76.06	2793	0	0	0	0	8	2395	11779	12303	12160	9738	1663	52839
Quinto Water District	64.32	67.55	11	0	0	0	0	0	618	911	1319	1137	1067	658	5721
Centinella Water District	66.20		30	0	0	0	0	0	42	258	294	212	148	88	1072
Romero Water District	66.70	68.03	30	0	0	0	0	0	221	570	475	555	666	256	2773
San Luis Water District, Municipal and Industrial	69.21		7	2	0	0	0	2	11	19	19	22	21	15	118
San Luis Water District	69.21	90.53	1293	170	0	172	2066	1524	8272	10895	10680	11916	9155	3170	a 59313
William Affonso	80.03		0	0	0	0	0	0	51	18	18	35	41	18	181
Grassland Water District	70.00		9790	4733	0	0	0	0	0	0	0	0	0	3541	18064
Sam Hamburg Farms	90.53		4	4	4	3	1	2	3	3	3	5	4	4	40
Panoche Water District	93.25	96.70	1442	1152	590	161	210	2107	9657	9523	10379	13016	9370	2679	60286
Eagle Field Water District	93.27	94.57	64	0	0	0	0	0	490	802	731	1106	861	314	4368
Oro Loma Water District	95.50	96.62	0	0	0	0	0	0	602	1075	1016	1241	969	82	4985
West Side Golf Club	95.95		9	7	8	7	5	6	10	24	23	27	28	19	173
Mercy Springs Water District	97.70	99.81	287	0	0	0	0	0	300	1790	1907	2358	2260	679	9581
Panoche Water District, Municipal and Industrial	100.84		1	1	1	1	1	1	1	1	1	1	1	1	12
Widren Water District	102.03		0	0	0	0	0	0	83	382	345	346	390	131	1677
Broadview Water District	102.95		977	125	0	0	0	478	3673	2715	2955	3516	1110	141	15690
Firebaugh Canal Company	109.45		0	0	0	0	0	0	293	7587	7621	8106	7475	492	31574
State Fish and Game Salmon Run			21011	0	0	0	0	0	0	0	0	0	0	0	21011
Total			39997	6264	603	370	2319	4270	41365	86518	86600	100073	79552	26306	474237
Net Deliveries DMC to Mendota Pool	115.62		67398	8957	938	3299	397	639	14124	118617	128269	176446	167252	101803	788138
Net Deliveries DMC to O'Neill Forebay	69.30		103726	b-5514	b-936	67951	30898	31322	88066	68595	60213	18665	34225	107845	605058
								Madera Canal							
Madera Irrigation District	6.10	32.2	0	0	0	0	1720	9685	23697	33731	40571	47949	36629	11334	205316
Adobe Ranch	20.6		62	16	0	0	0	0	0	0	0	0	19	34	131
Chowchilla Water District	35.9		0	0	0	0	0	2428	17223	21182	26392	29578	28272	8755	133830
Total			62	16	0	0	1720	12113	40920	54913	66963	77527	64920	20123	339277
								Millerton Lake							
Fresno County Water District #18			7	3	3	3	2	3	7	14	18	21	19	13	113
County of Madera			2	0	1	0	1	0	1	1	1	1	2	1	11
Total			9	3	4	3	3	3	8	15	19	22	21	14	124

TABLE B-6 (Cont.)

DELIVERIES FROM CENTRAL VALLEY PROJECT CANALS
October 1972 through September 1973

WATER USER	MILE POST FROM CANAL HEAD FROM	TO	IN ACRE-FEET OCT.	NOV.	DEC.	JAN	FEB	MAR.	APR	MAY	JUNE	JULY	AUG.	SEPT.	TOTAL
							Friant-Kern Canal								
Garfield Water District	7.53		137	0	0	0	155	14	146	641	549	537	447	270	2896
Dog Creek Water District	14.8		0	0	0	0	0	0	0	0	0	0	0	0	0
International Water District	14.9		129	0	0	0	0	0	0	189	207	236	211	185	1157
Academy Water District	17.63		0	0	0	0	7	0	0	0	0	0	0	0	7
Round Mountain Ranch	20.22		0	0	0	0	0	0	0	0	0	0	0	27	27
Consolidated Irrigation District	28.50		0	0	0	0	38307	68421	35579	22000	5966	0	0	0	170273
Last Chance Water Ditch Company	28.50		0	0	0	0	0	0	0	0	0	0	0	0	0
Laguna Irrigation District	28.50		0	0	0	0	1553	0	0	0	0	0	0	0	1553
Liberty Water District	28.50		0	0	0	0	0	0	2479	521	0	0	0	0	3000
Corcoran Irrigation District	28.50		0	0	0	0	3107	0	0	0	0	0	0	0	3107
Stratford Irrigation District	28.50		0	0	0	0	0	0	0	0	0	0	0	0	0
Tulare Lake Basin Water Storage District	28.50 & 95.64		0	0	0	0	0	0	0	0	0	0	0	0	0
Alta Irrigation District	28.50		0	0	0	0	0	0	0	0	0	0	0	0	0
City of Fresno	25.51		38	13	0	0	41	0	0	0	0	0	9223	9777	19092
Fresno Irrigation District	25.51 & 28.50		0	0	0	0	0	1494	c 440	8	35	133	20938	17577	40625
Murphy Slough Association	28.50		0	0	0	0	1109	0	0	0	0	0	0	0	1109
Cohn Central Consolidated R.D. #761	28.50		0	0	0	0	0	0	0	0	0	0	0	0	0
Empire Westside Irrigation District	28.50		0	0	0	0	0	0	0	0	0	0	0	0	0
Kings River Water Association	28.50		0	0	0	0	0	0	0	0	0	0	0	0	0
Kings County Water District	28.50	71.29	0	0	0	0	14326	9500	2500	7537	0	0	0	0	33863
Hills Valley Irrigation District	41.12		0	0	0	0	0	0	0	103	171	179	182	133	768
Orange Cove Irrigation District	35.87	53.31	2477	290	0	0	0	0	367	4435	5419	6315	6476	4612	30391
City of Orange Cove	43.44		25	5	0	0	2	8	24	45	54	56	54	42	315
Stone Corral Irrigation District	56.90	64.40	359	44	0	0	0	0	147	1236	1317	1716	1714	845	7378
Ivanhoe Irrigation District	65.04	68.13	980	169	0	0	318	315	1008	1152	1593	2489	2914	2323	13261
Tulare Irrigation District	68.14	71.29	0	0	0	0	10408	6817	31976	28491	19625	25821	13706	13482	150326
Lakeside Irrigation Water District	69.42		0	0	0	0	4134	0	0	0	0	0	0	0	4134
Kaweah Delta Water Conservation District	69.08	71.29	0	0	0	0	6937	2039	0	0	0	0	0	0	8976
Exeter Irrigation District	72.52	79.24	881	186	0	0	0	18	375	2847	3477	3584	3792	2941	18101
Lewis Creek Water District	81.54		61	0	0	0	0	0	10	137	166	194	191	111	870
Lindsay-Strathmore Irrigation District	85.56		1804	119	0	0	0	0	59	0	776	2884	4255	3720	d 13617
Lindmore Irrigation District	86.17	91.12	1888	111	0	0	0	0	1210	6502	8002	9588	10175	6581	44057
Porterville Irrigation District	93.93	98.62	0	0	0	0	52	127	1720	2491	2799	3437	2719	940	14265
Lower Tule Irrigation District	95.67	98.62	0	1236	0	0	1550	1238	11544	36871	43369	30252	26541	14749	167350
Tea Pot Dome	99.35		307	5	0	0	0	0	79	741	811	916	954	758	4571
Saucelito Irrigation District	98.62	107.37	639	0	0	0	21	12	2822	4424	6969	7936	6976	3569	33368
Cloer Community Service District	101.60		0	0	0	0	0	0	4	29	26	19	20	21	119
Terra Bella Irrigation District	102.65		1125	23	0	0	0	0	181	2570	3205	3548	3735	2461	16848
Pixley Irrigation District	102.69		0	0	0	0	102	0	893	4116	6958	7648	7565	3898	31180
Delano-Earlimart Irrigation District	109.48	118.45	3792	898	0	0	737	744	9857	22558	30432	31049	22364	10890	133321
Alpaugh Irrigation District	112.96		0	0	0	0	0	0	0	275	104	2303	2041	280	5003
Southern San Joaquin Municipal Utility District	117.44	127.97	3110	1277	0	0	633	1130	9918	17897	23739	27639	21426	9372	116141
Rag Gulch Water District	117.96		0	0	0	0	0	0	358	1190	1641	1953	1579	1155	7876
Kern County Water Agency	130.03		0	0	0	0	0	0	0	0	0	0	0	0	0
Shafter-Wasco Irrigation District	134.42	137.17	2019	604	47	0	799	2359	5116	7839	11329	12806	10941	5011	58870
Rosedale Rio Bravo Water Storage District	151.81		0	2696	2281	0	5348	1692	17774	9000	0	0	0	0	38791
Buena Vista Water Storage District	151.81		0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Water Storage District	151.80		1271	0	0	0	4007	7771	20855	33337	32252	24369	21739	11153	156754
Total			21042	7676	2328	0	93653	103699	157441	219182	210991	207607	202878	126883	e 1353380

Data furnished by U. S. Bureau of Reclamation. Acre-feet values are published as received and not rounded to the criteria used by the Department of Water Resources. Deliveries include operational spill, but do not include wasteway spill.

a Includes deliveries to Westlands Water District under separate agreement.
b Net delivery of (minus) acre-feet results from water being taken from O'Neill Forebay to Delta-Mendota Canal for delivery downstream.
c Includes 440 acre-feet transferred to James Irrigation District.
d Does not include 2,346 acre-feet water transported from Wutchumna Canal.
e Does not include 52 acre-feet operational spill.

TABLE B-7

DELIVERIES FROM CALIFORNIA AQUEDUCT[a]
October 1972 through September 1973

WATER USER	MONTHLY DELIVERIES IN ACRE-FEET												TOTAL
	OCT.	NOV.	DEC.	JAN.	FEB	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT	
Delta Pumping Plant (Inflow to California Aqueduct)	179737	207069	208366	82390	26800	38326	46567	103282	149535	164967	180195	102705	1489939
					North San Joaquin Division								
South Bay Pumping Plant	6732	8229	9193	3556	263	397	4602	11515	12714	15008	16550	8406	97165
Oak Flat Water District	0	48	0	0	0	0	664	700	663	1151	853	184	4263
Total	6732	8277	9193	3556	263	397	5266	12215	13377	16159	17403	8590	101428
California Aqueduct at Check 12 (Inflow to San Luis Field Division)	172388	198828	199475	79110	26331	37641	40947	90384	135067	147281	160666	94428	1382546
					O'Neill Forebay[b]								
San Luis Water District	26	5	4	3	3	3	388	898	815	901	793	226	4065
					San Luis Division[b]								
San Luis Water District	0	52	0	0	0	42	777	256	2099	2463	725	222	6636
Panoche Water District	399	1969	1010	1226	873	1343	5917	5263	5269	7083	4620	1402	36374
Westlands Water District	31217	14001	17299	34806	32218	28816	81336	89594	124822	149422	115629	33194	752354
City of Huron	37	31	24	31	30	33	45	62	66	83	87	70	599
City of Coalinga	340	240	287	234	197	216	325	504	637	660	616	534	4790
Avenal Community Service District	33	25	25	25	18	20	32	66	76	89	83	63	555
Total	32026	16318	18645	36322	33336	30470	88432	95745	132969	159800	121760	35485	801308
					South San Joaquin Division								
Tulare Lake Basin Water Storage District	36484	21841	7229	5109	0	0	3603	141	113	13863	26490	15675	130548
Kings County	165	0	165	165	0	0	165	0	165	170	170	170	1335
Dudley Ridge Water District	3179	1185	894	857	17	193	2288	3131	5078	7484	6129	4374	34809
Empire West Side Irrigation District	78	0	0	67	0	0	410	661	1346	1393	1034	0	4989
Hacienda Water District	0	0	0	0	0	0	0	120	140	0	220	600	1080
Kern County Water Agency	13659	8965	5340	9601	19991	19818	24432	43049	69624	81884	70227	22495	389085
J. G. Boswell Company[c]	739	0	0	0	254	315	278	464	990	1091	924	42	5097
Buena Vista Water Storage District[c]	0	0	0	0	0	199	670	0	1943	1989	1144	0	5945
Total	54304	31991	13628	15799	20262	20525	31846	47566	79399	107874	106338	43356	572888
					Coastal Branch								
Devil's Den Water District	394	147	1482	1105	760	854	429	765	1679	2686	2578	632	13511
Kern County Water Agency	1957	879	1160	2157	956	3031	6398	12602	16869	22891	20530	4380	93810
Total	2351	1026	2642	3262	1716	3885	6827	13367	18548	25577	23108	5012	107321

Data furnished by the Division of Operations and Maintenance.

a Entitlement and Surplus water have been combined in this table and do not include operational losses or change in storage.
b Deliveries made by U. S. Bureau of Reclamation.
c Repayment of Preconsolidation water in addition to water supplied by Kern County Water Agency.

TABLE 8-8

IMPORTS AND EXPORTS
October 1972 through September 1973

WATER USER	MONTHLY DELIVERIES IN ACRE-FEET												TOTAL
	OCT.	NOV.	DEC.	JAN	FEB	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
						Imports from Delta							
California Aqueduct (a)	173005	198840	199173	78834	26537	37929	41965	91767	136821	149959	163645	94299	1392774
Delta-Mendota Canal	207307	0	28	90489	35027	39400	146813	275367	273183	285340	276125	226500	1855579
Total Imports	380312	198840	199201	169323	61564	77329	188778	367134	410004	435299	439770	320799	3248353
						Exports							
City and County of San Francisco (b)	22320	14233	9455	2299	17421	12357	15739	21790	21351	25158	25481	24411	212015
A. D. Edmonston Pumping Plant (c)	0	21399	27755	24433	14219	16880	3387	34259	51166	66453	33897	31545	325393
Total Exports	22320	35632	37210	26732	31640	29237	19126	56049	72517	91611	59378	55956	537408

Data for Delta-Mendota Canal furnished by U. S. Bureau of Reclamation. Data for Tuolumne River exports furnished by City and County of San Francisco. Data for California Aqueduct furnished by Department of Water Resources, Division of Operations and Maintenance. Acre-feet values are published as received and not rounded to the criteria normally used by the Department of Water Resources.

(a) Water pumped at Delta Pumping Plant less deliveries to South Bay Aqueduct.
(b) Exports from the Tuolumne River.
(c) Deliveries to Southern California.

TABLE B-9

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	C03110	TULARE LAKE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15						LAKE DRY							15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
30 03 10	119 49 35			196.8	6-28-41		FEB 37-DATE	1937		0.00	USCGS

Station located 2.2 miles southwest of Chatom Ranch, 6 miles southwest of Corcoran on south end of El Rico Bridge. Tulare Lake receives water from Kings, Kaweah, and Tule Rivers during high-water periods and occasionally from Kern River, Deer Creek, and several small intermittent streams. Elevation at lowest point of lake bed is now about 175 feet, U. S. Geological Survey datum. Records furnished by Tulare Lake Basin Water Storage District and the Boswell Company.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B07885	SAN JOAQUIN RIVER BELOW FRIANT

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	2.28	2.18	2.19	2.01	1.98	2.13 E	5.44	3.57	2.43	2.48	2.38	2.32	1
2	2.25	2.17	2.15	2.01	1.97	2.06 E	5.43	2.19	2.43	2.48	2.43	2.32	2
3	2.23	2.17	2.16	2.01	1.96	2.08 E	5.42	2.19	2.43	2.49	2.47	2.32	3
4	2.23	2.13	2.13	2.01	1.96	2.22 E	5.42	2.19	2.43	2.49	2.47	2.30	4
5	2.23	2.07	2.08	2.01	1.98	2.06 E	5.42	2.19	2.44	2.49	2.47	2.27	5
6	2.26	2.07	2.09	2.02	2.02	2.08 E	5.41	2.19	2.45	2.48	2.47	2.27	6
7	2.30	2.07	2.06	2.02	2.20	2.13 E	5.40	2.19	2.45	2.48	2.45	2.25	7
8	2.30	2.07	2.00	2.03	2.09	2.08	5.38	2.20 E	3.42	2.48	2.43	2.22	8
9	2.33	2.04	1.99	2.06	2.04	2.05	5.38	2.30 E	4.64	2.48	2.43	2.22	9
10	2.35	2.01	2.00	1.98	2.29	2.03	5.38	2.19 E	6.08	2.47	2.42	2.22	10
11	2.35	1.99	2.00	1.85	4.46	2.20	5.37	2.19 E	6.06	2.47	2.42	2.22	11
12	2.35	1.93	2.00	1.84	5.68	2.07	5.37	2.26 E	6.01	2.46	2.42	2.22	12
13	2.35	1.93	2.00	1.83	5.56	2.03	5.36	2.38 E	5.73	2.46	2.40	2.24	13
14	2.35	1.91	1.99	1.83	6.15	1.99	5.38	2.47 E	5.30	2.46	2.39	2.18	14
15	2.32	1.78	1.99	1.83	7.04	1.98	5.38	2.52 E	3.13	2.45	2.38	2.17	15
16	2.29	1.77	2.04	1.93	6.98	1.97	5.37	2.51 E	2.52	2.45	2.37	2.20	16
17	2.28	1.76	2.10	2.06	6.96	1.97	5.36	2.51 E	2.44	2.47	2.37	2.20	17
18	2.24	1.77	2.09	2.02	6.93	1.96	5.36	2.52 E	2.43	2.46	2.37	2.21	18
19	2.22	1.78	2.07	2.04	6.92	1.95	5.36	2.49 E	2.43	2.45	2.36	2.25	19
20	2.19	1.78	2.01	1.96	6.40	2.54	5.40	2.47 E	2.44	2.45	2.36	2.26	20
21	2.19	1.82	2.01	1.96	4.71	2.22	5.42	2.47 E	2.44	2.45	2.36	2.26	21
22	2.19	1.99	2.01	1.95	2.24	2.30	5.42	2.47 E	2.45	2.45	2.36	2.26	22
23	2.18	2.00	2.01	1.93	2.02	2.15	5.42	2.47 E	2.45	2.44	2.35	2.26	23
24	2.16	2.03	2.02	1.92	2.02	2.11	5.42	2.44 E	2.45	2.41	2.35	2.27	24
25	2.16	2.10	2.02	1.92	1.99	2.09	5.41	2.42 E	2.46	2.40	2.34	2.29	25
26	2.16	2.14	2.02	1.92	1.99	2.23	5.40	2.43 E	2.46	2.40	2.34	2.31	26
27	2.17	2.17	2.03	1.90	2.14	4.06	5.39	2.44 E	2.47	2.39	2.34	2.33	27
28	2.17	2.22	2.02	1.89	2.46	5.32	5.39	2.43 E	2.47	2.39	2.33	2.33	28
29	2.17	2.22	2.02	1.96		5.48	5.39	2.44 E	2.47	2.39	2.32	2.33	29
30	2.18	2.23	2.01	2.05		5.46	4.83	2.44 E	2.48	2.39	2.32	2.32	30
31	2.18		2.01	2.01		5.45		2.40 E		2.38	2.32		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	GAGE HT.	DATE	TIME	GAGE HT.	DATE	TIME	GAGE HT.	DATE	TIME	GAGE HT.
2-14-73	2200	7.10									
3-29-73	1200	5.52									
6-11-73	0800	6.45									

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 59 04	119 43 24	SW 7 11S 21E	77200	23.8	12-11-37	OCT 07-DATE		1938		294.00	USGS

Station located 2 miles downstream from Friant Dam and 1.5 miles downstream from Cottonwood Creek. Flow regulated by Millerton Lake beginning in 1944, and by other upstream reservoirs. Records furnished by U. S. Geological Survey. Drainage area is 1,675 square miles.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT

(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B07400	SAN JOAQUIN RIVER NEAR STEVINSON

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	62.23	61.63 E	62.12	62.50 E	64.75	68.89	68.67	62.08	61.55	61.53	61.32	61.56	1
2	61.97	61.66 E	62.09	62.48	64.21	70.22	68.85	62.19	61.51	61.44	61.24	61.54	2
3	61.89	61.68 E	62.07	62.38	63.86	69.06	68.90	62.41	61.65	61.37	61.19	61.28	3
4	61.75	61.69 E	62.06	62.32	63.58	68.03	68.11	62.49	62.11	61.32	61.14	61.19	4
5	61.57	61.70 E	62.07	62.26 E	63.44	67.85	67.52	62.84	62.48	61.31	61.07	61.20	5
6	61.45	61.71	62.10	62.15 E	63.53	68.57	67.50	62.81	62.45	61.26	61.02	61.31	6
7	61.43	61.65	62.13	62.18 E	63.60	68.80	67.46	62.68	61.99	61.17	61.01	61.67	7
8	61.46	61.55	62.14	62.40 E	64.81	69.82	67.02	62.69	61.65	61.22	61.07	62.68	8
9	61.48	61.62	62.15	62.68 E	64.70	70.76	66.86	62.63	61.50	61.29	61.14	62.81	9
10	61.52	61.88	62.15 E	63.32 E	65.09	70.25	66.95	62.56	61.55	61.44	61.13	62.62	10
11	61.53	62.15	62.15 E	64.18 E	67.38	69.26	66.55	62.43	61.51	61.47	61.20	62.37	11
12	61.46	62.67	62.15 E	64.35	71.39	68.72	65.82	62.38	61.52	61.30	61.37	62.43	12
13	61.42	62.91	62.21	64.87	73.54	68.86	65.08	62.35	61.53	61.20	61.57	62.53	13
14	61.49	63.14	62.69	65.08	73.78	68.48	64.42	62.32	61.54	61.30	61.90	62.39	14
15	61.33	64.07	63.19	64.54	73.29	67.73	64.11	62.30	61.55	61.50	61.75	61.98	15
16	61.29	65.76	63.36	64.35	72.57	67.15	64.03	62.38	61.55	61.38	61.55	61.78	16
17	61.30	65.60	63.16	66.01	72.05	66.62	64.02	62.44	61.55	61.37	61.42	62.30	17
18	61.35	65.15	63.15	69.73	71.95	66.10	63.95	62.42	61.54	61.47	61.25	62.48	18
19	61.41	64.52	64.83	70.00	71.94	66.01	64.06	62.18	61.56	61.45	61.29	62.54	19
20	61.79	64.00	65.20	69.67	71.89	66.03	63.63	61.94	61.57	61.37	61.31	62.35	20
21	62.12	63.52	65.26	68.90	71.65	67.41	63.29	62.25	61.55	61.33	61.38	62.50	21
22	61.83	63.12	65.10 E	67.88	71.10	69.62	63.02	62.66	61.51	61.37	61.37	62.55	22
23	61.53	62.95	64.50 E	67.00	70.02	69.94	62.92	62.73	61.50	61.36	61.39	62.64	23
24	61.44	62.80	64.00 E	66.25	67.91	69.48	62.80	62.67	61.55	61.33	61.32	62.77	24
25	61.42 E	62.43	63.20 E	65.54	66.46	68.55	62.71	62.62	61.54	61.33	61.24	62.81	25
26	61.42 E	62.18	63.50 E	65.01	66.46	67.89	62.58	62.67	61.54	61.30	61.20	62.81	26
27	61.45 E	62.22	63.25 E	64.76	66.72	68.29	62.32	62.77	61.55	61.40	61.18	62.61	27
28	61.49 E	62.15	63.00 E	64.47	67.17	68.92	62.10	62.75	61.59	61.40	61.28	62.39	28
29	61.52 E	62.10	62.80 E	64.17		68.54	62.11	62.12	61.55	61.60	61.44	61.97	29
30	61.56 E	62.08	62.70 E	64.17		68.30	62.22	61.85	61.50	61.64	61.61	61.63	30
31	61.59 E		62.60 E	65.02		68.48		61.67		61.53	61.60		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-19-73	1000	70.05									
2-14-73	1530	74.02									
3- 9-73	1515	70.96									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 17 42	120 51 00	26 7S 10E	26740	76.23	2-26-69	OCT 61-DATE	MAY 61-SEP 61	1961		0.00	USCGS

Station located on bridge 2.3 miles south of Stevinson on Lander Avenue. Flows regulated by upstream reservoirs and diversions. Drainage area is 7,388 square miles.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B07375	SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	55.08	54.75	56.23	55.50	58.37	61.77	61.64	56.48	55.66	55.50	55.58	55.63	1
2	55.27	54.88	56.17	55.43	58.00	63.05	61.83	56.50	55.77	55.52	55.41	55.67	2
3	55.08	54.86	56.12	55.37	57.70	63.05	61.94	56.53	55.83	55.50	55.36	55.69	3
4	54.86	54.86	55.98	55.28	57.49	62.30	61.62	56.49	55.84	55.54	55.37	55.68	4
5	54.69	54.90	55.93	55.18	57.32	61.68	60.87	56.54	55.97	55.55	55.23	55.50	5
6	54.54	54.91	55.95	55.17	57.31	61.92	60.62	56.57	55.98	55.47	55.18	55.35	6
7	54.43	54.84	55.93	55.15	57.30	62.26	60.64	56.58	55.78	55.39	55.17	55.38	7
8	54.36	54.81	55.90	55.16	57.74	62.71	60.29	56.53	55.64	55.45	55.22	55.74	8
9	54.39	54.86	55.91	55.42	58.11	63.45	59.98	56.39	55.59	55.40	55.36	56.08	9
10	54.33	54.94	55.88	55.68	58.11	63.69	60.10	56.25	55.45	55.52	55.32	56.07	10
11	54.48	55.10	55.76	56.32	59.91	63.23	59.97	56.25	55.42	55.54	55.26	55.95	11
12	54.43	55.44	55.64	56.96	62.79	62.60	59.37	56.22	55.61	55.45	55.49	55.86	12
13	54.51	55.72	55.57	57.19	64.74	62.33	58.67	56.21	55.64	55.33	55.60	55.81	13
14	54.53	56.03	55.63	57.68	65.60	62.16	58.15	56.21	55.69	55.29	55.84	55.72	14
15	54.67	56.64	55.87	57.44	65.71	61.57	57.90	56.23	55.58	55.30	55.74	55.74	15
16	54.78	58.20	56.13	57.25	65.41	60.90	57.80	56.29	55.64	55.34	55.47	55.79	16
17	54.67	58.96	56.09	57.78	65.08	60.27	57.84	56.25	55.74	55.29	55.34	55.92	17
18	54.67	58.83	56.11	61.41	64.86	59.63	57.68	56.15	55.65	55.39	55.32	56.06	18
19	54.78	58.38	56.71	62.37	64.78	59.33	57.67	55.99	55.79	55.38	55.28	56.07	19
20	54.77	57.96	57.43	62.60	64.74	59.33	57.55	55.75	55.85	55.36	55.26	56.03	20
21	55.30	57.61	57.65	62.32	64.64	59.98	57.42	55.99	55.87	55.51	55.21	55.91	21
22	55.42	57.27	57.42	61.65	64.43	61.94	57.15	56.02	55.81	55.65	55.27	55.94	22
23	55.23	57.06	57.12	60.74	63.98	62.81	57.06	56.01	55.64	55.59	55.35	56.11	23
24	55.10	56.95	56.91	59.93	63.04	62.81	57.07	56.08	55.57	55.42	55.47	56.25	24
25	55.02	56.80	56.76	59.29	61.44	62.29	56.98	55.99	55.64	55.51	55.48	56.18	25
26	55.00	56.60	56.53	58.76	60.49	61.57	56.81	55.93	55.75	55.60	55.56	56.13	26
27	54.83	56.51	56.29	58.49	60.59	61.37	56.59	56.02	55.69	55.48	55.54	56.16	27
28	54.47	56.47	56.03	58.32	60.90	61.88	56.50	56.15	55.62	55.31	55.54	56.15	28
29	54.59	56.41	55.82	58.09		61.86	56.56	56.00	55.68	55.32	55.60	56.02	29
30	54.71	56.31	55.71	57.94		61.53	56.57	55.75	55.66	55.58	55.65	55.94	30
31	54.73		55.59	58.31		61.58		55.68		55.69	55.65		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-20-73	1000	62.65									
2-15-73	0030	65.77									
3-10-73	0300	63.76									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 18 35	120 55 45		9180a	68.05	2-26-69	MAR 37-DATE		1944	1957	-3.73	USCGS
								1957	1959	-3.77	USCGS
								1959		0.00	USCGS

Station located 30 feet below Fremont Ford Bridge, 4.5 miles west of Stevinson, 6.7 miles upstream from the Merced River. Drainage area is approximately 8,090 square miles.

a During periods of high flow some water bypasses the station through three overflow channels known as North, Middle, and South Mud Sloughs.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B05170	MERCED RIVER BELOW SNELLING

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	8.46	6.38	6.44	6.38	6.50	6.61	6.52	6.57	6.37	6.04	6.06	6.07	1
2	8.41	6.39	6.43	6.40	6.50	6.55	6.51	6.60	6.38	6.02	6.17	6.14	2
3	8.42	6.32	6.41	6.41	6.51	6.58	6.52	6.37	6.34	6.13	6.13	6.09	3
4	8.43	6.31	6.44	6.42	6.50	6.70	6.53	6.35	6.33	6.13	6.11	6.12	4
5	8.47	6.32	6.43	6.40	6.48	6.56	6.69	6.29	6.35	6.17	6.13	6.15	5
6	8.46	6.30	6.47	6.43	6.60	6.72	6.76	6.33	6.36	6.13	6.09	6.19	6
7	8.45	6.35	6.47	6.41	6.57	6.72	6.91	6.35	6.36	6.12	6.10	6.21	7
8	8.45	6.38	6.47	6.42	6.50	7.24	7.11	6.34	6.43	6.11	6.12	6.16	8
9	7.36	6.39	6.45	6.49	6.49	6.67	6.87	6.33	6.43	6.11	6.06	6.17	9
10	6.53	6.47	6.44	6.56	6.78	6.63	6.78	6.30	6.45	6.11	6.05	6.19	10
11	6.50	6.55	6.43	6.46	8.28	6.66	6.74	6.36	6.38	6.12	6.06	6.20	11
12	6.38	6.46	6.44	6.58	7.04	6.58	6.76	6.34	6.36	6.17	6.13	6.16	12
13	6.35	6.52	6.45	6.46	6.88	6.55	6.56	6.35	6.33	6.14	6.10	6.16	13
14	6.35	6.74	6.43	6.44	6.98	6.53	6.62	6.38	6.31	6.11	6.00	6.17	14
15	6.35	6.75	6.44	6.42	6.79	6.51	6.60	6.32	6.24	6.13	5.99	6.24	15
16	6.35	6.68	6.42	7.18	6.63	6.54	6.59	6.34	6.28	6.15	6.04	6.26	16
17	6.34	6.60	6.69	7.03	6.58	6.53	6.62	6.39	6.30	6.12	6.03	6.25	17
18	6.33	6.58	6.62	6.62	6.55	6.51	6.61	6.42	6.35	6.10	5.91	6.26	18
19	6.30	6.56	6.70	6.57	6.56	6.52	6.58	6.38	6.33	6.08	6.00	6.24	19
20	6.32	6.53	6.51	6.49	6.53	7.06	6.49	6.36	6.32	6.03	6.03	6.19	20
21	6.32	6.53	6.49	6.46	6.54	6.64	6.46	6.29	6.28	6.06	6.00	6.21	21
22	6.31	6.53	6.54	6.44	6.51	6.66	6.55	6.14	6.18	6.07	6.07	6.22	22
23	6.33	6.45	6.50	6.46	6.53	6.56	6.47	6.34	6.08	6.08	6.02	6.29	23
24	6.34	6.47	6.48	6.45	6.55	6.56	6.37	6.33	6.11	6.14	6.04	6.33	24
25	6.34	6.46	6.47	6.45	6.52	6.54	6.34	6.24	6.08	6.12	6.07	6.30	25
26	6.33	6.46	6.42	6.46	6.58	6.85	6.37	6.33	6.16	6.09	6.05	6.33	26
27	6.33	6.46	6.45	6.43	6.63	6.60	6.33	6.35	6.14	6.08	6.04	6.35	27
28	6.33	6.45	6.43	6.45	6.91	6.59	6.29	6.32	6.11	6.08	6.10	6.30	28
29	6.36	6.48	6.43	6.51		6.55	6.34	6.24	6.15	6.09	6.09	6.34	29
30	6.38	6.46	6.42	6.49		6.56	6.40	6.27	6.13	6.07	6.05	6.35	30
31	6.38		6.40	6.47		6.56		6.32		6.01	6.09		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
02-11-73	0845	9.40									
03-08-73	0645	8.94									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 30 06	120 27 03	NE17 5S 14E	14500	17.10	1-7-65	NOV 58-DATE		1958		221.12	USGS

Station located 0.2 mile downstream from Merced-Snelling highway bridge, 1.4 miles southwest of Snelling. Flow regulated by upstream reservoirs and dams. Drainage area is 1,096 square miles. Prior to November 1958, records available for a site 3.6 miles downstream. Merced Irrigation District Main Canal and several small gravity diversions are upstream from station.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B05155	MERCED RIVER AT CRESSEY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	13.32	11.03	11.14	11.16	11.43	12.27	11.42	11.09	11.10	10.76	10.69	10.86	1
2	13.35	11.04	11.14	11.13	11.36	11.65	11.36	11.22	11.19	10.76	10.65	10.88	2
3	13.28	11.04	11.14	11.13	11.32	11.51	11.29	11.24	11.26	10.77	10.61	10.92	3
4	13.28	11.10	11.14	11.13	11.30	12.01	11.29	11.10	11.30	10.70	10.65	10.99	4
5	13.30	11.15	11.15	11.12	11.28	11.82	11.29	11.17	11.20	10.75	10.70	10.93	5
6	13.33	11.12	11.16	11.11	11.20	11.54	11.38	11.17	11.14	10.70	10.73	10.95	6
7	13.32	11.12	11.19	11.12	11.57	12.19	11.42	11.18	11.12	10.69	10.78	10.99	7
8	13.26	11.10	11.17	11.12	11.51	13.59	11.59	11.14	11.09	10.78	10.72	11.02	8
9	13.26	11.04	11.17	11.16	11.35	12.89	11.64	11.13	11.09	10.78	10.69	11.02	9
10	11.85	11.02	11.17	11.31	11.40	11.89	11.51	11.11	11.11	10.70	10.77	10.99	10
11	11.42	11.17	11.16	11.50	17.15	11.73	11.43	11.10	11.13	10.67	10.79	10.98	11
12	11.34	11.28	11.15	11.65	15.98	11.78	11.40	11.11	11.14	10.63	10.81	11.01	12
13	11.23	11.39E	11.14	11.81	13.15	11.56	11.37	11.15	11.14	10.60	10.86	11.03	13
14	11.15	11.44E	11.14	11.40	12.32	11.46	11.32	11.14	11.13	10.58	10.87	11.08	14
15	11.17	11.49E	11.13	11.29	13.23	11.41	11.35	11.08	11.10	10.74	10.78	11.20	15
16	11.16	11.53	11.13	11.41	12.15	11.38	11.32	11.08	11.10	10.77	10.66	11.10	16
17	11.15	11.46	11.15	13.47	11.84	11.37	11.27	11.13	11.12	10.78	10.65	11.17	17
18	11.15	11.40	11.84	12.29	11.70	11.35	11.28	11.15	11.11	10.73	10.63	11.22	18
19	11.12	11.34	11.67	12.02	11.63	11.32	11.25	11.12	11.02	10.76	10.65	11.22	19
20	11.10	11.31	11.84	11.62	11.55	12.22	11.21	11.11	11.04	10.75	10.62	11.17	20
21	11.10	11.27	11.43	11.41	11.49	12.34	11.18	11.12	11.01	10.80	10.60	11.15	21
22	11.10	11.26	11.35	11.34	11.48	11.84	11.17	11.11	10.99	10.82	10.62	11.14	22
23	11.08	11.25	11.33	11.31	11.43	11.67	11.25	11.01	10.96	10.77	10.58	11.18	23
24	11.10	11.19	11.33	11.28	11.41	11.47	11.20	11.06	10.95	10.71	10.61	11.22	24
25	11.09	11.19	11.29	11.27	11.48	11.42	11.17	11.20	10.97	10.65	10.65	11.22	25
26	11.08	11.17	11.28	11.26	11.43	12.64	11.11	11.20	10.79	10.67	10.75	11.19	26
27	11.06	11.18	11.22	11.24	11.87	12.19	11.05	11.21	10.68	10.64	10.79	11.17	27
28	11.03	11.17	11.23	11.22	13.35	11.70	10.98	11.27	10.73	10.64	10.80	11.20	28
29	11.03	11.15	11.20	11.23		11.57	11.06	11.22	10.67	10.72	10.78	11.22	29
30	11.03	11.16	11.18	11.93		11.45	11.15	11.12	10.66	10.75	10.84	11.22	30
31	11.04		11.18	11.87		11.40		11.08		10.75	10.92		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
02-11-73	2100	20.77									
02-28-73	1000	15.02									
03-08-73	1830	16.28									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 25 28	120 39 47	SW 9 6S 12E	34400	22.67	12-4-50	JUL 41-DATE	APR 41-JUL 41	1950	1962	96.24	USCGS
				32.67a	12-4-50			1962		86.23	USCGS

Station located 150 feet downstream from McSwain Bridge, immediately north of Cressey. Prior to May 20, 1960, station located 250 feet upstream from bridge. Flow regulated by upstream reservoirs and diversions. Drainage area is 1,224 square miles.

a Reflects present datum.

TABLE B-9 (Cont.)

WATER YEAR	STATION NO.	STATION NAME
1973	B07300	SAN JOAQUIN RIVER NEAR NEWMAN

DAILY MEAN GAGE HEIGHT
(IN FEET)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	50.11	48.81	49.69	49.06	51.56	55.18	53.78	49.63	48.80	48.46	48.47	48.55
2	50.32	48.77	49.58	48.99	51.20	55.75	53.90	49.56	48.82	48.56	48.32	48.55
3	50.28	48.76	49.53	48.93	50.90	56.21	53.99	49.64	48.91	48.54	48.27	48.58
4	50.16	48.74	49.48	48.88	50.67	55.64	53.94	49.66	48.92	48.61	48.23	48.61
5	50.03	48.76	49.44	48.83	50.48	54.88	53.29	49.61	48.98	48.59	48.24	48.63
6	49.99	48.83	49.44	48.79	50.44	54.62	52.87	49.61	49.01	48.47	48.30	48.56
7	50.06	48.91	49.44	48.77	50.42	54.89	52.79	49.69	48.84	48.37	48.20	48.54
8	50.00	48.97	49.44	48.74	50.73	55.42	52.61	49.73	48.84	48.40	48.20	48.71
9	50.00	49.00	49.46	48.76	51.13	56.92	52.39	49.61	48.75	48.45	48.28	49.00
10	49.97	49.06	49.48	48.83	51.04	57.36	52.44	49.44	48.67	48.43	48.26	49.00
11	49.43	49.16	49.45	49.23	52.29	56.89	52.36	49.34	48.70	48.37	48.25	48.87
12	49.02	49.51	49.44	49.79	57.06	55.97	51.95	49.33	48.83	48.36	48.28	48.77
13	48.85	49.74	49.40	50.02	58.97	55.22	51.46	49.26	48.92	48.25	48.42	48.69
14	48.73	49.90	49.34	50.43	60.86	54.86	51.09	49.30	48.73	48.18	48.52	48.71
15	48.61	50.30	49.30	50.35	62.00	54.35	50.85	49.27	48.75	48.19	48.53	48.78
16	48.58	51.14	49.28	50.14	61.82	53.63	50.82	49.21	48.72	48.34	48.47	48.78
17	48.63	51.97	49.28	50.45	60.92	53.01	50.66	49.22	48.74	48.30	48.37	48.79
18	48.71	52.02	49.27	52.82	60.07	52.42	50.54	49.13	48.79	48.28	48.22	48.87
19	48.53	51.71	49.46	54.42	59.54	52.00	50.44	49.08	48.83	48.35	48.28	49.06
20	48.84	51.38	50.07	54.97	59.29	51.94	50.41	49.01	48.84	48.35	48.31	49.05
21	51.64	51.09	50.29	55.01	59.09	52.56	50.39	49.12	48.81	48.36	48.24	49.00
22	51.97	50.77	50.27	54.47	58.75	53.81	50.32	49.21	48.71	48.55	48.18	49.00
23	51.97	50.55	50.04	53.58	58.12	55.02	50.22	49.07	48.61	48.69	48.21	49.03
24	51.93	50.46	49.83	52.78	57.05	55.47	50.19	49.08	48.60	48.53	48.25	49.14
25	51.92	50.33	49.72	52.19	55.43	55.15	50.05	49.06	48.68	48.40	48.32	49.22
26	51.92	50.22	49.62	51.73	54.00	54.33	49.96	49.00	48.72	48.46	48.39	49.20
27	51.73	50.11	49.50	51.41	53.57	54.21	49.81	49.04	48.71	48.39	48.50	49.22
28	49.42	50.04	49.43	51.24	54.05	54.33	49.66	49.13	48.61	48.29	48.52	49.11
29	49.06	49.97	49.33	51.05		54.32	49.67	49.20	48.56	48.24	48.51	48.96
30	48.92	49.84	49.22	50.91		53.99	49.68	49.02	48.56	48.40	48.57	48.88
31	48.85		49.13	51.27		53.78		48.87		48.50	48.62	

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME
01-20-73	2130	55.12								
02-15-73	1930	62.15								
03-09-73	2200	57.45								

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	D
			CFS	GAGE HT.	DATE			FROM	TO		
37 21 02	120 58 34	SW 3 7S 9E	34700a	65.90	2-26-69	APR 12-DATE		1912		47.24	U
									1959	47.31	U
								1959		0.00	U

Station located 300 feet downstream from bridge on Hills Ferry Road, 500 feet downstream from the Merced River, 3.5 miles northeast of Newman. Records furnished by U. S. Geological Survey. Drainage area is 9,520 square mile This station equipped with DWR radio telemeter. Flow records are published in the U. S. Geological Survey report "Surface Water Records of California". Flows regulated by upstream reservoirs and diversions.

a During periods of high flow the Merced River overflows into Merced River Slough bypassing this station on the San Joaquin River. The maximum discharge of record (34,700 cfs) includes flow in Merced River Slough.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B07200	SAN JOAQUIN RIVER AT PATTERSON BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	34.68	33.10	33.99	33.32	35.73	39.79	38.09	33.92	33.20	32.95	32.93	33.25	1
2	34.87	33.06	33.88	33.27	35.46	40.08	38.06	33.91	33.14	32.94	32.78	33.32	2
3	34.86	33.07	33.81	33.22	35.22	40.42	38.17	33.86	33.19	32.80	32.76	33.29	3
4	34.68	33.13	33.79	33.18	35.02	40.51	38.31	34.00	33.22	32.75	32.72	33.29	4
5	34.51	33.09	33.71	33.14	34.85E	39.86	38.12	33.94	33.18	32.74	32.92	33.23	5
6	34.42	33.16	33.70	33.11	35.05E	39.30	37.56	33.94	33.29	32.67	32.87	33.20	6
7	34.43	33.25	33.70	33.09	35.25E	39.29	37.21	34.10	33.13	32.61	32.73	33.17	7
8	34.43	33.32	33.70	33.09	35.47E	39.57	37.08	33.99	32.97	32.68	32.76	33.33	8
9	34.39	33.26	33.73	33.15	35.68E	40.41	36.95	33.95	32.94	32.78	32.78	33.45	9
10	34.38	33.29	33.76	33.42	36.58E	41.49	36.88	33.77	32.89	32.74	32.84	33.57	10
11	34.10	33.55	33.73	33.63	38.80E	41.58	36.76	33.76	32.81	32.70	32.90	33.56	11
12	33.70	33.65	33.67	33.92	40.90E	41.03	36.53	33.63	32.78	32.61	32.96	33.39	12
13	33.60	33.84	33.61	34.13	42.45E	40.17	36.09	33.60	32.95	32.58	32.98	33.31	13
14	33.47	34.07	33.53	34.43	43.75	39.51	35.76	33.78	32.92	32.51	32.93	33.30	14
15	33.35	34.40	33.51	34.46	45.10	39.10	35.41	33.66	33.03	32.54	33.09	33.41	15
16	33.29	35.00	33.54	34.40	45.96	38.48	35.36	33.68	32.93	32.78	33.01	33.41	16
17	33.30	35.85	33.59	35.35	45.93	37.84	35.24	33.65	33.04	32.73	32.92	33.44	17
18	33.37	36.16	33.57	36.31	45.28	37.26	35.04	33.50	33.12	32.54	32.87	33.51	18
19	33.21	35.92	33.66	38.15	44.56	36.76	34.82	33.47	33.05	32.59	32.91	33.60	19
20	33.17	35.61	34.12	38.77	44.05	36.70	34.72	33.49	33.09	32.73	32.97	33.65	20
21	34.37	35.34	34.36	38.99	43.76	36.76	34.64	33.67	33.13	32.77	32.87	33.69	21
22	35.53	35.07	34.42	38.89	43.49	37.68	34.71	33.69	32.91	32.92	32.82	33.71	22
23	35.75	34.81	34.24	38.45	43.11	38.61	34.60	33.55	32.97	33.18	32.96	33.78	23
24	35.80	34.68	34.04	37.75	42.43	39.42	34.40	33.46	32.87	33.20	32.98	33.83	24
25	35.80	34.58	33.95	36.67	41.27	39.63	34.29	33.52	33.01	33.05	32.96	33.87	25
26	35.82	34.47	33.88	36.12	39.81	39.21	34.15	33.41	32.98	32.96	33.11	33.77	26
27	35.82	34.36	33.78	35.79	38.68	38.61	34.01	33.33	33.01	32.84	33.29	33.71	27
28	34.58	34.28	33.69	35.57	39.10	38.66	33.90	33.49	32.96	32.85	33.21	33.71	28
29	33.40	34.22	33.56	35.31		38.59	34.01	33.47	32.81	32.79	33.02	33.73	29
30	33.22	34.13	33.45	35.22		38.46	34.06	33.34	32.89	32.92	33.12	33.79	30
31	33.17		33.37	35.60		38.19		33.32		32.88	33.25		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
01-21-73	1200	39.03									
02-16-73	1930	46.12									
03-11-73	0845	41.66									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 29 52	121 04 52	SW15 5S 8E		54.0	6-13-38		APR 38-SEP 66	1938	1959	0.00	USED
				50.47a	6-13-38	OCT 69-DATE		1959		0.00	USCGS
			5460b	42.65	3- 9-70			1959		3.53	USED

Station located 1000 feet downstream on left bank from the Patterson-Turlock Bridge, 3.1 miles northeast of Patterson. Drainage area is 9,758 square miles.

a Reflects present datum.
b Maximum discharge since station was rated in October 1969.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B04150	TUOLUMNE RIVER AT HICKMAN BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	69.68	71.27	71.62	70.62 E	71.19	70.97	70.56	69.96	69.71	69.68	70.10	69.67	1
2	70.95	71.26	71.61	70.64 E	71.58	70.85	70.15	69.79	69.71	69.65	70.24	69.70	2
3	71.93	71.25	71.54	70.80 E	71.27	70.80	70.09	69.73	69.72	69.62	69.75	69.70	3
4	70.64	71.26	71.55 E	70.97 E	70.79	70.85	70.08	69.75	69.72	69.61	69.85	69.64	4
5	70.56	71.04	71.44 E	71.53	70.77	70.81	70.08	69.71	69.92	69.71	69.89	69.62	5
6	70.54	70.96	71.47 E	71.14	71.35	70.81	70.06	69.71	70.25	69.58	69.75	69.67	6
7	70.52	71.04	71.45 E	70.78	71.41	70.99	70.05	69.71	70.41	69.60	69.66	69.66	7
8	70.51	71.04	71.45 E	70.82	71.23	71.15	70.05	69.70	70.39	69.59	69.63	69.67	8
9	70.52	71.04	71.45 E	71.22	71.23	71.04	70.03	69.71	70.47	69.59	69.63	69.66	9
10	70.51	71.07	71.41 E	71.21	71.19	70.84	70.03	69.74	70.16	69.84	69.59	69.68	10
11	70.51	71.10	71.39 E	71.20	72.02	70.81	70.03	69.72	69.83	69.94	69.57	69.66	11
12	70.52	71.03	71.44 E	71.30	71.52	70.80	70.02	69.72	69.71	69.79	69.63	69.66	12
13	70.53	70.98	71.48 E	71.14	71.52	70.86	70.09	69.71	69.69	69.71	69.71	69.70	13
14	70.65	71.09	71.65	70.80	71.30	70.85	69.99	69.71	69.67	69.68	69.62	69.76	14
15	70.60	71.09	71.52	70.82	71.31	70.84	69.98	71.62	69.67	69.64	70.02	69.67	15
16	70.81	71.11	70.99	71.29	71.13	70.76	69.98	70.66	69.66	69.64	70.22	69.67	16
17	71.10	71.07	70.71	71.47	70.98	70.76	69.98	69.87	69.64	69.62	69.87	69.66	17
18	70.68	71.04	70.76	71.47	70.69	70.75	69.97	69.78	69.67	69.58	69.74	69.66	18
19	70.67	70.95	70.86	71.70	70.66	70.75	69.97	69.73	69.66	69.58	69.65	69.66	19
20	70.66	71.17	70.76 E	71.24	70.65	70.90	69.95	69.73	69.64	69.59	69.63	69.67	20
21	71.15	71.64	70.74 E	70.87	70.93	70.83	69.94	69.72	70.29	69.59	69.60	69.68	21
22	71.07	71.64	70.69 E	70.83	70.84	70.82	69.98	69.71	70.57	69.61	69.59	69.66	22
23	70.65	71.63	70.70 E	71.42	70.76	70.79	69.97	69.69	69.82	69.62	69.59	69.67	23
24	70.80	71.56	70.68 E	71.42	70.81	70.77	69.98	69.67	69.73	69.57	69.59	69.68	24
25	71.21	71.61	70.66 E	71.41	70.77	70.77	69.99	69.70	69.71	69.57	69.58	69.67	25
26	71.04	71.56	70.68 E	71.26	70.74	70.96	69.99	69.72	70.05	70.00	69.62	69.66	26
27	70.65	71.55	70.70 E	71.03	71.22	70.86	70.00	69.73	70.74	70.47	69.65	69.64	27
28	70.81	71.61	70.70 E	70.78	71.27	70.80	69.99	69.74	70.63	69.96	69.65	69.65	28
29	71.03	71.62	70.66 E	70.86		70.77	69.99	69.71	70.55	69.92	69.66	69.69	29
30	70.78	71.62	70.66 E	71.58		70.76	70.00	69.71	69.78	69.74	69.65	69.84	30
31	71.20		70.64 E	71.04		70.76		69.70		69.77	69.69		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
10- 3-72	0245	73.64	5-15-73	2030	72.39						
1-19-73	0000	71.70									
2-11-73	1715	72.53									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 38 10	120 45 14	NW34 3S 11E	59000	96.2	12-8-50	JUL 32-OCT 35 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE		1932		-1.13	USCGS

Station located at Hickman-Waterford road bridge, immediately south of Waterford. Flow regulated by reservoirs and powerplants. In August 1964, this station was moved approximately one-quarter mile downstream to a point immediately upstream of the new Hickman-Waterford road bridge. Drainage area is 1,655 square miles.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B04130	DRY CREEK NEAR MODESTO

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	68.47	67.47	68.72	67.60	70.07	72.95	68.23	68.30	68.22	68.15	68.17	68.21	1
2	68.35	67.44	68.72	67.57	69.14	69.64	68.25	68.27	68.26	68.15	68.14	68.20	2
3	68.30	67.42	68.73	67.53	68.82	68.96	68.13	68.34	68.30	68.19	68.14	68.30	3
4	68.22	67.58	68.77	67.50	68.67	69.80	68.11	68.32	68.26	68.07	68.09	68.18	4
5	68.07	67.60	68.79	68.25	68.75	70.38	68.35	68.30	68.22	68.09	68.06	68.23	5
6	67.95	67.59	68.77	68.80	68.90	69.03	68.67	68.36	68.21	68.04	68.10	68.23	6
7	67.82	67.48	68.79	68.92	69.87	70.67	68.64	68.47	68.25	68.11	68.12	68.29	7
8	67.74	67.44	68.79	68.95	70.04	73.64	68.79	68.47	68.15	68.05	68.20	68.19	8
9	67.73	67.56	68.78	69.12	69.04	76.50	68.69	68.37	68.15	68.06	68.12	68.09	9
10	67.78	67.74	68.82	71.58	69.02	70.31	68.50	68.33	68.18	68.12	68.11	68.13	10
11	67.82	68.09	68.84	74.66	77.91	69.30	68.42	68.20	68.22	68.05	68.14	68.20	11
12	67.93	68.15	68.82	73.13	85.41	69.62	68.85	68.34	68.24	68.01	68.10	68.22	12
13	67.95	67.97	68.80	75.67	77.10	68.91	68.24	68.32	68.31	68.01	67.94	68.20	13
14	67.97	67.96	68.78	70.50	72.77	68.69	68.37	68.25	68.31	68.10	67.97	68.23	14
15	67.97	68.62	68.77	69.27	74.53	68.61	68.51	68.27	68.36	68.03	68.03	68.31	15
16	67.87	69.63	68.77	69.60	71.22	68.44	68.80	68.35	68.47	68.11	68.15	68.24	16
17	67.77	69.79	68.78	79.13	69.79	68.27	68.52	68.26	68.41	68.18	68.12	68.19	17
18	67.65	69.31	69.13	74.66	69.24	68.16	68.25	68.15	68.32	68.12	68.06	68.21	18
19	67.58	68.94	70.17	73.10	68.91	68.10	68.27	68.26	68.28	68.08	68.03	68.10	19
20	67.66	68.76	70.21	71.32	68.70	68.43	68.21	68.16	68.29	68.10	68.08	68.04	20
21	67.75	68.49	69.22	69.55	68.52	71.90	68.17	68.16	68.27	68.12	68.07	68.13	21
22	67.73	68.45	68.35	69.10	68.40	70.31	68.22	68.21	68.20	68.14	68.06	68.08	22
23	67.67	68.75	68.06	68.87	68.30	70.53	68.31	68.26	68.25	68.14	68.07	68.15	23
24	67.62	68.77	67.92	68.72	68.23	69.00	68.36	68.18	68.15	68.13	68.14	68.20	24
25	67.62	68.76	67.92	68.62	68.70	68.66	68.30	68.28	68.23	68.19	68.19	68.18	25
26	67.59	68.74	67.87	68.60	69.25	69.47	68.32	68.32	68.21	68.16	68.26	68.22	26
27	67.55	68.73	67.90	68.64	68.78	71.95	68.28	68.24	68.14	68.11	68.21	68.20	27
28	67.56	68.73	67.80	68.64	75.15	69.24	68.33	68.34	68.15	68.18	68.12	68.14	28
29	67.49	68.73	63.73	68.48		68.75	68.37	68.18	68.13	68.08	68.15	68.15	29
30	67.48	68.72	67.66	68.58		68.48	68.34	68.18	68.12	68.17	68.17	68.07	30
31	67.48		67.58	71.89		68.30		68.17		68.17	68.15		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
01-13-73	0100	78.05	02-12-73	0400	87.07						
01-17-73	1245	80.90	02-13-73	1630	79.07						
01-31-73	1415	73.40	03-09-73	0200	80.69						

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 39 26	120 55 19	SE24 3S 9E	7710	88.04	12-23-55	MAR 41-DATE		1941		0.00	USCGS

Station located 0.1 mile downstream from Claus Road Bridge, 4 miles east of Modesto. Tributary to Tuolumne River. June 1930 to March 1941, records available for a site 2.5 miles downstream. This is a Department of Water Resources-Modesto Irrigation District cooperative station. Drainage area is 192.3 square miles. There are no upstream impairments.

TABLE B-9 (Cont.)

WATER YEAR	STATION NO.	STATION NAME
1973	B04130	TUOLUMNE RIVER AT MODESTO

DAILY MEAN GAGE HEIGHT
(IN FEET)

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	41.09	41.58	41.93	41.42	41.85	42.33	41.48	41.20	41.05	41.12	41.16	41.06	1
2	41.15	41.60	41.93	41.42	41.89	41.71	41.33	41.17	41.07	41.06	41.21	41.06	2
3	41.88	41.60	41.90	41.55	41.88	41.60	41.24	41.15	41.08	41.06	41.19	41.09	3
4	41.58	41.67	41.90	41.66	41.63	41.64	41.24	41.14	41.10	41.04	41.07	41.05	4
5	41.35	41.58	41.92	41.81	41.52	41.74	41.25	41.14	41.06	41.01	41.10	41.04	5
6	41.30	41.51	41.93	41.85	41.76	41.59	41.29	41.12	41.16	41.00	41.10	41.03	6
7	41.29	41.51	41.93	41.66	41.95	41.71	41.28	41.17	41.25	40.99	41.05	41.07	7
8	41.25	41.52	41.94	41.60	41.93	42.03	41.30	41.11	41.25	41.01	41.07	41.10	8
9	41.25	41.52	41.94	41.76	41.79	43.22	41.30	41.10	41.28	41.00	41.03	41.05	9
10	41.26	41.56	41.93	41.90	41.80	41.81	41.29	41.08	41.23	41.01	41.05	41.06	10
11	41.25	41.61	41.92	42.26	43.14	41.64	41.25	41.09	41.17	41.10	41.03	41.08	11
12	41.28	41.60	41.93	42.09	48.51	41.65	41.32	41.11	41.09	41.10	41.03	41.07	12
13	41.29	41.56	41.97	42.39	44.50	41.60	41.26	41.10	41.07	41.05	41.06	41.06	13
14	41.37	41.59	42.01	41.90	42.33	41.57	41.28	41.10	41.11	41.06	41.01	41.09	14
15	41.41	41.64	41.95	41.61	42.43	41.55	41.30	41.21	41.05	41.07	41.02	41.10	15
16	41.35	41.75	41.82	41.74	42.06	41.51	41.32	41.84	41.08	41.06	41.20	41.10	16
17	41.51	41.77	41.62	43.14	41.81	41.48	41.27	41.31	41.09	41.03	41.19	41.08	17
18	41.41	41.71	41.60	42.83	41.61	41.46	41.21	41.15	41.06	41.03	41.10	41.08	18
19	41.36	41.64	41.75	42.34	41.53	41.46	41.18	41.13	41.04	41.06	41.10	41.04	19
20	41.38	41.62	41.75	42.19	41.49	41.53	41.18	41.09	41.06	41.07	41.06	41.05	20
21	41.43	41.80	41.68	41.73	41.55	41.99	41.17	41.09	41.11	41.02	41.02	41.05	21
22	41.58	41.88	41.60	41.57	41.54	41.75	41.18	41.06	41.29	41.12	41.04	41.05	22
23	41.43	41.91	41.57	41.73	41.50	41.79	41.20	41.07	41.28	41.07	41.03	41.10	23
24	41.35	41.90	41.52	41.80	41.49	41.59	41.21	41.07	41.13	40.96	41.06	41.09	24
25	41.51	41.92	41.49	41.84	41.49	41.54	41.22	41.10	41.13	41.03	41.05	41.11	25
26	41.58	41.90	41.50	41.74	41.59	41.62	41.21	41.07	41.08	41.03	41.04	41.11	26
27	41.42	41.90	41.52	41.71	41.67	42.01	41.20	41.07	41.30	41.22	41.05	41.10	27
28	41.34	41.91	41.53	41.55	42.46	41.66	41.19	41.07	41.39	41.23	41.04	41.10	28
29	41.51	41.93	41.49	41.47		41.56	41.21	41.07	41.38	41.16	41.07	41.06	29
30	41.40	41.93	41.47	41.80		41.52	41.22	41.06	41.23	41.22	41.09	41.07	30
31	41.50		41.44	42.13		41.50		41.07		41.13	41.07		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-12-72	1200	49.55									
3-10-73		44.10									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 37 38	120 59 20	SW33 3S 9E	57000	69.19	12-9-50	JAN 95-DEC 96 MAR 40-DATE	1878-1884 1891-1894	1940		0.00	USCGS

Station located at U. S. Highway 99 Bridge. Records furnished by U. S. Geological Survey. Flow records are published in the U. S. Geological Survey report "Surface Water Records of California". Drainage area is 1,884 square miles. This station equipped with DWR radio telemeter. Flows regulated by upstream reservoirs and diversions.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B04105	TUOLUMNE RIVER AT TUOLUMNE CITY

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	22.85	24.20	25.35	23.90	25.69	28.51	25.06	23.48	23.06	23.28	23.14	23.05	1
2	22.94	24.32	25.35	23.88	25.31	27.01	24.83	23.42	23.05	23.14	23.27	23.06	2
3	23.95	24.33	25.32	23.98	25.42	26.49	24.50	23.33	23.07	23.08	23.35	23.07	3
4	25.12	24.55	25.26	24.31	25.02	26.55	24.47	23.32	23.07	23.03	23.13	23.07	4
5	23.92	24.42	25.28	24.74	24.45	26.71	24.48	23.30	23.01	22.97	23.07	23.02	5
6	23.63	24.17	25.34	25.11	24.70	26.18	24.38	23.30	23.00	22.93	23.09	23.01	6
7	23.54	24.05	25.36	24.75	25.36	25.90	24.16	23.41	23.27	22.85	23.02	23.03	7
8	23.45	24.11	25.35	24.44	25.76	26.81	24.14	23.32	23.44	22.84	23.04	23.11	8
9	23.38	24.31 E	25.38	24.57	25.28	28.88	24.09	23.31	23.51	22.84	22.92	23.08	9
10	23.39	24.30	25.36	25.02	25.19	28.16	24.06	23.21	23.53	22.83	22.95	22.96	10
11	23.39	24.31	25.30	26.53	26.38	27.50	23.90	23.26	23.32	22.95	22.89	23.01	11
12	23.44	24.43	25.32	25.98	32.07	27.20	23.96	23.28	23.11	23.01	22.89	23.07	12
13	23.50	24.30	25.39	27.28	32.33	26.74	23.88	23.30	23.03	22.94	22.96	23.02	13
14	23.56	24.36	25.57	26.15	30.28	26.12	23.84	23.23	23.14	22.98	22.91	23.07	14
15	23.83	24.48	25.44	24.85	30.19	25.76	23.84	23.12	23.07	23.05	22.87	23.04	15
16	23.71	24.69	25.23	24.73	30.97	25.46	23.88	24.77	23.06	23.01	23.01	23.12	16
17	23.85	24.82	24.71	26.76	31.31	25.08	23.81	24.31	23.16	22.96	23.33	23.10	17
18	24.06	24.75	24.40	28.55	31.25	24.82	23.67	23.48	23.06	22.94	23.15	23.10	18
19	23.67	24.53	24.64	26.97	30.54	24.66	23.58	23.33	23.00	22.98	23.16	23.05	19
20	23.60	24.30	24.73	27.34	29.71	24.76	23.53	23.23	22.98	23.03	23.05	23.01	20
21	23.63	24.63	24.76	26.18	29.14	25.75	23.44	23.25	22.96	23.00	22.98	23.06	21
22	24.10	25.09	24.41	25.49	28.86	25.78	23.41	23.18	23.33	23.01	22.96	23.02	22
23	24.14	25.26	24.40	25.25	28.51	26.01	23.49	23.19	23.71	23.08	22.97	23.16	23
24	23.73	25.30	24.22	25.48	28.06	25.89	23.49	23.18	23.31	22.89	23.01	23.11	24
25	23.82	25.28	24.12	25.43	27.42	25.87	23.54	23.18	23.15	22.79	23.00	23.16	25
26	24.24	25.32	24.07	25.24	26.64	25.88	23.50	23.16	23.03	22.80	23.03	23.16	26
27	24.13	25.26	24.10	25.00	25.91	26.46	23.45	23.17	23.20	23.03	22.96	23.15	27
28	23.72	25.27	24.15	24.70	26.63	26.12	23.44	23.10	23.80	23.36	22.94	23.14	28
29	23.78	25.33	24.10	24.38		25.59	23.42	23.15	23.87	23.28	22.97	23.12	29
30	24.00	25.35	24.03	24.66		25.38	23.46	23.09	23.67	23.35	22.97	23.11	30
31	23.81		23.97	25.73		25.22		23.07		23.25	23.05		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
01-18-73	0330	29.08									
02-12-73	2045	33.78									
03-09-73	1530	29.64									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 36 12	121 07 50	NW 7 4S 8E		46.65	12- 9-50	1930-DATE			1959	0.00	USED
				43.15a	12- 9-50			1960		0.00	USCGS
			37900b	42.86	1-27-69			1960		3.50	USED

Station located at highway bridge, 3.35 miles above mouth. Backwater at times, from the San Joaquin River, affects the stage-discharge relationship. Drainage area is 1,896 square miles. Flows regulated by upstream reservoirs and diversions.

a Reflects present datum.
b Maximum discharge since Department of Water Resources began operation of station in April 1966.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B07040	SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	15.19	14.67	16.14	15.02	18.00	21.21	19.98	15.58	17.37	14.18	14.05	14.21	1
2	15.23	14.70	16.05	14.96	17.78	20.88	19.81	15.52	17.40	14.16	14.06	14.30	2
3	15.49	14.69	15.94	14.93	17.70	20.55	19.66	15.47	17.00	14.08	14.01	14.38	3
4	16.33	14.84	15.91	15.07	17.47	20.63	19.64	15.39	16.67	14.13	14.00	14.31	4
5	15.83	14.86	15.87	15.18	17.07	20.67	19.59	15.38	16.54	14.03	13.96	14.20	5
6	15.50	14.71	15.86	15.37	17.03	20.24	19.29	15.10	16.27	13.99	14.08	14.18	6
7	15.39	14.67	15.89	15.30	17.91	19.92	18.82	15.08	16.26	13.87	13.93	14.20	7
8	15.38	14.76	15.89	15.07	18.46	20.36	18.55	15.04	16.21	13.83	13.82	14.29	8
9	15.36	14.76	15.89	15.08	17.96	21.45	18.34	14.93	16.12	13.94	13.84	14.44	9
10	15.34	14.78	15.91	15.46	17.82	22.18	18.07	14.89	16.14	13.97	13.85	14.46	10
11	15.28	15.13	15.87	16.34	18.63	21.93	17.75	14.82	16.20	13.96	13.98	14.43	11
12	15.03	15.30	15.84	16.74	21.68	21.71	17.54	14.80	16.24	13.92	14.16	14.43	12
13	14.90	15.37	15.82	17.33	24.11	21.29	17.25	14.79	15.87	13.95	14.12	14.32	13
14	14.84	15.60	15.85	17.63	24.02	20.65	17.01	14.86	15.30	13.92	14.08	14.39	14
15	14.86	15.76	15.72	16.93	24.10	20.14	17.02	14.77	14.94	14.05	13.98	14.47	15
16	14.76	16.13	15.72	16.71	24.89	19.77	16.97	15.10	14.80	14.11	14.11	14.68	16
17	14.70	16.60	15.56	17.49	25.33	19.36	16.79	15.47	14.77	14.19	14.13	14.59	17
18	14.88	16.96	15.34	19.79	25.33	19.34	16.51	16.18	14.69	14.02	14.03	14.56	18
19	14.72	16.89	15.38	19.63	24.68	19.20	16.14	16.55	14.43	13.84	13.95	14.64	19
20	14.54	16.64	15.65	20.09	23.86	19.19	15.92	16.63	14.31	13.96	14.05	14.90	20
21	14.66	16.48	15.94	19.89	23.22	19.43	15.81	16.72	14.34	14.11	13.91	14.88	21
22	15.78	16.55	15.96	19.51	22.91	19.94	15.69	16.95	14.41	14.23	13.81	14.86	22
23	16.29	16.49	15.90	19.18	22.64	20.40	15.70	16.91	14.59	14.33	13.88	15.03	23
24	16.26	16.44	15.73	18.93	22.28	20.78	15.42	16.04	14.51	14.24	14.03	15.17	24
25	16.25	16.38	15.57	18.57	21.74	20.93	15.30	15.59	14.44	14.07	14.07	15.23	25
26	16.43	16.36	15.48	18.25	20.92	20.94	15.20	15.69	14.27	13.83	14.14	15.28	26
27	16.44	16.28	15.44	17.86	20.06	20.90	15.27	16.32	14.25	13.80	14.20	15.20	27
28	16.16	16.21	15.42	17.59	20.05	20.82	15.35	16.97	14.47	14.00	14.25	15.17	28
29	15.15	16.19	15.33	17.30		20.53	15.41	16.95	14.48	14.07	14.13	15.20	29
30	14.86	16.19	15.21	17.18		20.37	15.62	16.70	14.34	14.10	14.06	15.23	30
31	14.60		15.12	17.61		20.20		17.05		14.09	14.10		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
02-17-73	2400	25.48									
03-10-73	0215	22.28									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 38 28	121 13 37	SW29 3S 7E	45,550	38.31a	1-27-69	JAN 50-MAR 52	SEP 43-DEC 49	1943	1959	0.00	USED
						OCT 65-DATE	APR 52-SEP 65	1959		0.00	USCGS
								1959		3.41	USED

Station located at State Highway 132 Bridge, 13 miles west of Modesto, 2 miles upstream from mouth of the Stanislaus River. Gage height-discharge relation affected by backwater from the Stanislaus River during high flows in the Stanislaus. Flows regulated by upstream reservoirs and diversions. Drainage area is 12,400 square miles.

a This maximum gage height of record does not represent the maximum discharge of record as the station was affected by backwater from the Stanislaus River.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B03175	STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	1.39	1.85	3.16	4.41	6.27	6.05	8.20	5.70	9.28	1.43	1.49	1.45	1
2	1.37	1.84	3.16	4.42	6.25	6.01	8.02	5.35	7.28	1.43	1.50	1.45	2
3	1.36	1.84	3.16	4.40	6.25	6.02	7.80	4.70	7.85	1.43	1.52	1.44	3
4	1.68	2.02	3.20	3.99	6.26	6.25	7.60	4.18	7.42	1.47	1.55	1.46	4
5	1.93	2.00	3.17	3.97	6.24	6.03	7.06	2.93	7.01	1.50	1.54	1.46	5
6	1.93	1.99	3.20	3.97	6.38	6.22	6.82	2.93	7.06	1.52	1.57	1.47	6
7	2.38	1.98	3.27	3.94	6.38	6.69	6.36	2.93	7.08	1.53	1.58	1.46	7
8	2.37	2.00	3.27	3.90	6.28	7.73	6.30	2.93	6.95	1.49	1.52	1.49	8
9	2.41	1.98	3.23	4.29	6.26	7.80	5.56	2.93	6.94	1.45	1.46	1.47	9
10	2.37	2.01	3.23	5.19	6.84	7.63	4.70	2.93	7.34	1.44	1.46	1.44	10
11	2.36	2.02	3.19	5.30	8.03	7.55	4.19	2.93	7.39	1.44	1.44	1.43	11
12	2.36	2.00	3.11	6.81	7.79	7.35	4.17	2.93	6.13	1.43	1.44	1.42	12
13	2.36	1.98	3.15	6.35	8.81	6.95	4.57	2.93	4.40	1.45	1.43	1.42	13
14	2.37	2.03	3.12	6.25	8.95	6.58	5.27	2.93	3.45	1.48	1.43	1.42	14
15	2.38	2.06	3.12	5.84	8.75	6.58	5.32	2.56	3.52	1.49	1.43	1.45	15
16	2.82	2.25	3.13	7.02	8.38	7.21	5.32	5.01	2.70	1.52	1.42	1.46	16
17	3.35	2.14	3.32	6.72	7.22	8.55	4.97	9.21	2.14	1.52	1.47	1.46	17
18	3.08	2.05	3.57	6.57	6.54	8.57	4.20	8.68	1.79	1.51	1.47	1.44	18
19	3.18	2.05	4.13	6.46	6.14	8.56	4.15	8.23	1.65	1.48	1.45	1.42	19
20	2.62	2.05	4.14	6.34	5.63	8.97	4.00	8.56	1.59	1.49	1.43	1.46	20
21	1.86	2.08	4.39	6.32	6.12	9.02	3.05	9.08	1.54	1.51	1.43	1.46	21
22	1.80	2.82	4.40	6.30	6.12	9.16	2.96	7.93	1.50	1.50	1.44	1.46	22
23	1.80	3.21	4.41	6.29	6.11	8.89	2.88	5.94	1.54	1.47	1.46	1.47	23
24	1.81	3.21	4.43	6.28	6.11	8.84	2.75	5.63	1.58	1.46	1.48	1.54	24
25	1.81	3.21	4.43	6.30	6.10	8.72	3.59	6.75	1.60	1.49	1.50	1.58	25
26	1.75	3.20	4.42	6.31	6.12	8.77	5.38	8.55	1.57	1.53	1.48	1.65	26
27	1.75	3.20	4.44	6.27	6.51	8.68	5.44	9.14	1.52	1.53	1.50	1.72	27
28	1.81	3.23	4.47	6.26	6.45	8.64	5.61	8.04	1.51	1.51	1.53	1.73	28
29	1.85	3.24	4.46	6.25		8.59	5.61	8.36	1.45	1.48	1.52	1.72	29
30	1.85	3.20	4.44	6.52		8.47	5.66	9.70	1.45	1.47	1.47	1.72	30
31	1.84		4.42	6.32		8.27		9.64		1.56	1.41		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-16-73	1900	8.26	5-16-73	2030	9.97						
2-14-73	1815	9.62	6- 1-73	0800	9.71						
3-21-73	2215	9.90									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 47 18	120 45 41	SW 4 2S 11E	62000	31.8	12-23-55	JUN 28-DEC 39 APR 40-DATE				117.21	USC&GS

Station located at bridge, 5.0 miles east of Oakdale. Flow regulated by reservoirs and powerplants. Drainage area is 1,020 square miles. This station is equipped with radio telemeter.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B03125	STANISLAUS RIVER AT RIPON

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	36.29	36.07	38.63	40.09	43.98	44.74	48.50	43.14	50.52	37.17	36.32	36.75	1
2	36.72	36.07	38.58	40.09	43.83	44.05	48.38	43.16	50.23	37.03	36.25	36.84	2
3	36.72	36.06	38.59	40.12	43.79	43.91	48.13	42.44	47.74	37.14	36.34	36.86	3
4	37.03	36.16	38.61	40.04	43.82	44.14	47.89	41.58	47.71	36.95	36.20	36.85	4
5	36.99	36.27	38.65	39.53	43.86	44.22	47.45	40.53	47.09	36.79	36.47	36.52	5
6	36.72	36.26	38.64	39.46	43.89	43.88	46.61	39.18	46.42	36.62	36.32	36.87	6
7	36.50	36.21	38.68	39.43	44.38	44.39	46.08	38.92	46.31	36.61	36.35	36.90	7
8	36.43	36.21	38.75	39.41	44.21	45.52	45.34	38.76	46.25	36.57	36.33	36.70	8
9	36.59	36.21	38.76	39.44	43.94	47.43	45.03	38.61	46.01	36.85	36.14	36.68	9
10	36.66	36.25	38.73	40.25	44.07	47.25	43.80	38.29	46.15	36.71	36.37	36.69	10
11	36.65	36.35	38.72	41.42	45.82	46.99	42.77	38.19	46.86	36.71	36.34	36.49	11
12	36.62	36.45	38.69	42.19	47.73	46.72	42.06	37.86	46.70	36.63	36.22	36.44	12
13	36.65	36.35	38.59	43.99	47.63	46.38	41.82	37.78	44.53	36.57	36.15	36.63	13
14	36.67	36.36	38.61	43.57	48.55	45.74	42.80	37.74	42.02	36.52	36.40	36.76	14
15	36.69	36.53	38.60	43.30	48.91	45.18	43.57	37.60	41.12	36.52	36.39	36.60	15
16	36.70	36.68	38.61	43.03	48.86	45.08	43.50	37.38	40.73	36.58	36.24	37.05	16
17	36.86	36.87	38.66	45.16	48.11	46.28	43.40	42.13	40.00	36.68	36.34	37.22	17
18	37.74	36.63	38.93	45.03	46.31	48.17	42.54	47.94	39.17	36.59	36.33	37.17	18
19	37.64	36.44	39.17	44.64	44.96	48.57	41.42	48.21	38.53	36.65	36.67	36.84	19
20	37.77	36.32	39.58	44.18	44.29	48.83	41.23	47.81	38.13	36.69	36.64	37.00	20
21	37.51	36.34	39.59	43.87	43.49	49.30	40.78	48.35	37.97	36.57	36.28	36.70	21
22	36.74	36.81	39.87	43.77	43.96	49.67	39.76	49.16	37.97	36.59	36.07	36.50	22
23	36.39	37.40	39.93	43.73	43.96	50.02	39.65	47.73	37.73	36.73	36.16	36.65	23
24	36.24	38.26	39.97	43.73	43.94	49.60	39.11	44.41	37.77	36.54	36.24	36.76	24
25	36.18	38.45	40.02	43.76	43.92	49.47	38.82	43.68	37.80	36.54	36.25	36.63	35
26	36.14	38.51	40.04	43.79	43.90	49.45	40.20	45.26	37.44	36.51	36.19	36.75	26
27	36.09	38.54	40.06	43.80	43.98	49.48	42.30	47.99	37.32	36.36	36.67	37.09	27
28	36.06	38.56	40.09	43.75	44.81	49.31	42.59	49.25	37.12	36.41	36.54	37.12	28
29	36.04	38.61	40.12	43.73		49.20	42.92	48.11	37.10	36.30	36.25	36.70	29
30	36.05	38.63	40.15	43.82		49.07	43.12	48.27	37.14	36.55	36.40	36.49	30
31	36.06		40.11	44.40		48.92		49.96		36.37	36.52		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
02-15-73	1900	49.15									
03-23-73	0230	50.13									
06-02-73	0500	50.71									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REP. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 43 50	121 06 35	SE29 2S 8E	62500	63.25	12-24-55	APR 40-DATE		1940		0.00	USGS

Station located 15 feet downstream from the Southern Pacific Railroad Bridge, 1.0 mile southeast of Ripon. Records furnished by U. S. Geological Survey. Flow records are published in U. S. Geological Survey report "Surface Water Records of California". Drainage area is 1,075 square miles.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B03115	STANISLAUS RIVER AT KOETITZ RANCH

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	27.27	26.82	29.50	30.92	34.61	35.46	38.82	34.08	40.43	28.81	27.59	28.17	1
2	27.55	26.82	29.45	30.93	34.43	34.75	38.66	34.10	40.40	28.56	27.57	28.50	2
3	27.57	26.81	29.47	30.94	34.39	34.60	38.50	33.71	38.52	28.58	27.70	28.43	3
4	27.82	26.95	29.48	30.94	34.38	34.73	38.27	32.90	38.18	28.67	27.67	28.32	4
5	27.92	27.08	29.51	30.47	34.44	34.89	37.89	32.18	37.83	28.60	28.18	27.99	5
6	27.62	27.07	29.52	30.34	34.44	34.57	37.24	30.88	37.09	28.34	27.95	28.18	6
7	27.41	26.98	29.55	30.30	34.81	34.90	36.79	30.54	36.98	28.42	27.87	28.25	7
8	27.25	26.97	29.62	30.29	34.81	35.81	36.17	30.37	36.93	28.38	27.94	28.17	8
9	27.47	26.97	29.64	30.33	34.55	37.55	35.92	30.05	36.70	28.44	27.85	28.10	9
10	27.56	27.03	29.62	30.86	34.56	37.58	34.97	29.85	36.75	28.19	27.94	28.28	10
11	27.53	27.11	29.60	32.02	35.81	37.36	34.05	29.74	37.20	28.12	27.97	28.15	11
12	27.47	27.19	29.58	32.64	37.67	37.14	33.23	29.41	37.29	28.08	27.78	28.01	12
13	27.52	27.16	29.47	34.37	37.66	36.85	32.90	29.44	35.64	27.97	27.72	28.29	13
14	27.54	27.16	29.48	34.23	38.53	36.35	33.57	29.21	33.47	27.80	27.76	28.28	14
15	27.56	27.26	29.49	34.01	38.79	35.79	34.50	29.15	32.43	28.09	27.90	27.96	15
16	27.58	27.42	29.48	33.71	38.95	35.68	34.57	29.04	32.01	27.99	27.87	28.38	16
17	27.78	27.61	29.52	35.22	38.45	36.36	34.35	32.06	31.53	28.15	27.71	28.72	17
18	28.83	27.48	29.69	35.63	37.03	38.18	33.74	37.80	30.71	28.00	27.84	28.62	18
19	28.70	27.28	29.99	35.16	35.75	38.65	32.61	38.40	30.13	28.15	28.14	28.28	19
20	28.84	27.14	30.35	34.87	35.02	38.85	32.47	38.14	29.66	28.16	28.20	28.56	20
21	28.54	27.09	30.38	34.53	34.35	39.27	32.19	38.49	29.45	28.08	27.94	28.42	21
22	27.62	27.46	30.66	34.41	34.61	39.57	31.33	39.19	29.48	28.05	27.74	28.06	22
23	27.23	27.92	30.75	34.37	34.66	39.96	31.07	38.40	29.33	28.15	27.77	28.05	23
24	27.05	28.85	30.79	34.36	34.63	39.68	30.52	35.61	29.31	27.99	28.07	28.31	24
25	26.97	29.14	30.84	34.37	34.61	39.53	30.21	34.64	29.40	28.07	27.90	28.27	25
26	26.92	29.29	30.87	34.39	34.58	39.50	31.00	35.71	29.09	27.97	27.78	28.35	26
27	26.85	29.35	30.89	34.41	34.63	39.57	33.12	38.05	28.95	27.72	27.94	28.52	27
28	26.81	29.39	30.91	34.37	35.18	39.44	33.55	39.42	28.70	27.72	27.95	28.68	28
29	26.80	29.45	30.94	34.33		39.38	33.86	38.57	28.79	27.65	27.70	28.43	29
30	26.80	29.49	30.96	34.38		39.21	34.10	38.44	28.60	27.99	27.73	28.14	30
31	26.82		30.96	34.86		39.11		39.82		27.85	27.91		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-17-73	2145	36.00	5-31-73	2400	40.35						
2-15-73	2300	39.08	6- 2-73	0545	40.63						
3-22-73	0730	40.03									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
37 41 57	121 10 08	SW 2 3S 7E		50.5	12-24-55	OCT 62-DATE	MAR 50-SEP 62	1950	1962	-0.63	USC&GS
								1963	1969	0.37	USC&GS
								1970		0.00	USC&GS

Station located on left bank 9.35 miles upstream from mouth, 0.6 mile northwest of Bacon and Gates Road Junction, 3.7 miles southwest of Ripon. It is possible that backwater from San Joaquin River could affect the stage-discharge relationship. Flow regulated by upstream reservoirs and diversions. Drainage area is 1,094 square miles.

TABLE B-9 (Cont.)

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	B07020	SAN JOAQUIN RIVER NEAR VERNALIS

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	11.07	10.45	12.41	11.80	14.87	17.68	17.15	12.84	14.68	10.32	9.82	10.15	1
2	11.06	10.50	12.35	11.63	14.69	17.50	16.99	12.79	14.76	10.35	9.84	10.28	2
3	11.31	10.52	12.27	NR	14.59	17.12	16.84	12.78	14.36	10.14	9.78	10.46	3
4	11.76	10.64	12.18	11.70	14.42	17.15	16.79	12.55	13.90	10.20	9.81	10.33	4
5	11.70	10.72	12.14	11.72	14.11	17.26	16.72	12.47	13.80	10.15	9.83	10.18	5
6	11.51	10.60	12.12	11.79	14.02	16.93	16.43	11.99	13.47	10.00	10.01	10.12	6
7	11.31	10.54	12.13	11.79	14.73	16.62	15.97	11.80	13.43	9.89	9.78	10.22	7
8	11.29	10.58	12.14	11.58	15.27	17.00	15.66	11.73	13.39	9.86	9.66	10.29	8
9	11.29	10.62	12.14	11.58	14.90	18.00	15.44	11.57	13.31	9.95	9.69	10.47	9
10	11.26	10.62	12.14	11.89	14.70	18.83	15.08	11.52	13.29	9.95	9.66	10.50	10
11	11.21	10.91	12.14	12.79	15.31	18.63	14.71	11.44	13.38	9.84	9.84	10.44	11
12	11.01	11.13	12.11	13.43	17.92	18.43	14.35	11.37	13.47	9.85	10.06	10.46	12
13	10.84	11.21	12.09	14.01	20.18	18.09	14.04	11.29	13.10	9.84	9.99	10.34	13
14	10.78	11.41	12.06	NR	20.41	17.52	13.89	11.32	12.39	9.77	9.90	10.42	14
15	10.82	11.59	12.07	NR	20.46	17.00	14.06	11.18	11.85	9.94	9.82	10.48	15
16	10.73	11.93	12.02	13.65	21.09	16.66	14.07	11.27	11.64	10.05	9.95	10.68	16
17	10.66	12.38	11.91	14.30	21.50	16.33	13.90	11.90	11.50	10.08	9.96	10.74	17
18	10.87	12.75	11.70	16.37	21.51	16.49	13.63	13.52	11.37	9.95	9.91	10.69	18
19	10.93	12.77	11.74	16.34	20.88	16.50	13.12	14.10	11.02	9.73	9.83	10.62	19
20	10.77	12.54	12.03	16.60	20.10	16.49	12.89	14.18	10.79	9.82	9.98	10.76	20
21	10.78	12.32	12.35	16.47	19.45	16.66	12.78	14.21	10.71	10.01	9.84	10.82	21
22	11.60	12.36	12.44	16.13	19.12	17.11	12.55	14.44	10.72	10.09	9.65	10.65	22
23	12.12	12.40	12.43	15.85	18.92	17.51	12.46	14.44	10.86	10.23	9.64	10.80	23
24	12.12	12.46	12.38	15.62	18.64	17.86	12.12	13.54	10.85	10.14	9.88	11.00	24
25	12.09	12.52	12.22	15.34	18.22	17.98	11.92	12.87	10.79	10.04	9.99	11.00	25
26	12.21	12.54	12.14	15.07	17.55	18.01	11.80	12.94	10.60	9.77	10.07	11.11	26
27	12.28	12.51	12.05	14.74	16.83	17.96	12.26	13.61	10.47	9.66	10.15	11.08	27
28	12.10	12.46	12.02	14.50	16.71	17.92	12.56	14.32	10.65	9.74	10.22	11.04	28
29	11.15	12.44	11.94	14.24		17.66	12.61	14.36	10.62	9.89	10.08	11.09	29
30	10.68	12.45	11.86	14.12		17.51	12.82	14.06	10.47	9.93	9.96	11.06	30
31	10.42		11.85	14.46		17.36		14.36		9.94	9.94		31

E — ESTIMATED

NR — NO RECORD

NE — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-20-73	1500	16.72	3-28-73	0200	18.04						
2-18-73	0100	21.63									
3-10-73	0600	18.88									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC T & R M.D B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT	DATE			FROM	TO		
37 40 34	121 15 55		79000	27.75	12- 9-50	JUL 22-DEC 23		1931	1959	8.4	USED
				32.81a	12- 9-50	JAN 24-FEB 25					
			52600	34.55	1-27-69	JUN 25-OCT 28		1931	1959	5.06	USCGS
						MAY 29-DATE		1959		0.00	USCGS

Station located on left bank 20 feet downstream from the Durham Ferry Highway Bridge, 3 miles downstream from the Stanislaus River 3.4 miles northeast of Vernalis. Drainage area is approximately 13,540 square miles. Natural flow of stream affected by storage reservoirs, power developments, ground water withdrawals and diversions for irrigation. Low flows consist mainly of return flow from irrigation. This station is operated under the Federal-State Cooperative Program. Equipped with DWR radio telemeter. The records are furnished by the U. S. Geological Survey.

a Reflects present datum. The gage height of 32.81 feet does not represent the maximum discharge of 79,000 cfs. as water was bypassing the station through levee breaks upstream from station.

TABLE B-10

CORRECTIONS AND REVISIONS
TO
PREVIOUSLY PUBLISHED REPORTS

This table shows corrections and revisions to surface water measurement data of the Bulletin No. 130 series and Bulletin No. 23 series not previously published.

For other corrections and revisions to previously published reports dating back to 1924, refer to Page 160, Table B-11, Bulletin No. 130-66, Volume IV.

TABLE B-10 (Cont.)

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS

LOCATION OF ERROR			ITEM	CHANGE	
PAGE	MILE & BANK	NAME		FROM	TO
		Bulletin No. 23-58 Surface Water Flow for 1958			
132		Table 149 San Joaquin River at Whitehouse	July acre-feet	247300	24730
			Water Year Total	1292000	1069000
		Bulletin No. 130-63 Hydrologic Data 1963 Volume IV, San Joaquin Valley			
B-19		Table B-9 Miami Creek near Oakhurst	Maximum Discharge 1963 Water Year	1140E	804
			Maximum Discharge of record	1140E	804
B-29		Table B-19 Bear Creek near Cathay	Maximum Discharge 1963 Water Year — flow	3850E	4170E
			gage ht.	9.98	10.07
			Maximum Discharge of record — flow	3850E	4170E
			gage ht.	9.98	10.07
B-98	8 (12.00-13.75)	Table B-87 Tranquillity Irrigation District	Diversions — Oct.	204	204
			Nov.		
			Dec.		
			Jan.		52
			Feb.	1777	2005
			March	4066	4112
			April		383
			May		2291
			June		7200
			July	557	7454
			Aug.	6306	6659
			Sept.	1414	1414
			Total	14324	31774
		Bulletin No. 130-64 Hydrologic Data 1964 Volume IV, San Joaquin Valley			
68		Table B-4 Miami Creek near Oakhurst	Maximum Discharge of record	1140E	804
78		Table B-4 Bear Creek near Catheys Valley	Maximum Discharge of record — flow	3850E	4170E
			gage ht.	9.98	10.07
		Bulletin No. 130-65 Hydrologic Data 1965 Volume IV, San Joaquin Valley			
61		Table B-5 Miami Creek near Oakhurst	Maximum Discharge of record	1140E	804
72		Table B-5 Bear Creek near Catheys Valley	Maximum Discharge of record — flow	4166E	4170E
			gage ht.	9.97	10.07
			date	1-7-65	2-1-63
82		Table B-5 Orestimba Creek near Crows Landing	Daily Mean Discharge Jan. 8	0.0	B NR
			9	0.0	A NR
			10	0.0	C NR
			11	0.0	K NR
			12	0.0	W NR
			13	0.0	A NR
			14	0.0	T NR
			15	0.0	E NR
			16	0.0	R NR
			17	0.0	NR
115	112.55R	Table B-7 Diversions - San Joaquin River	L. A. Thompson	Delete Entire Line	
117	233.63L	Table B-7 United Packing Company	Diversions — Total	omitted in 1965	700
		Bulletin No. 130-66 Hydrologic Data 1966 Volume IV, San Joaquin Valley			
76		Table B-4 Bear Creek near Catheys Valley	Maximum Discharge of record — flow	4166E	4170E
			gage ht.	9.97	10.07
			date	1-7-65	2-1-63
78		Table B-4 Burns Creek at Hornitos	Maximum Discharge 1966 Water Year	1330E	2020E

TABLE B-10 (Cont.)

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS

LOCATION OF ERROR			ITEM	CHANGE	
PAGE	MILE & BANK	NAME		FROM	TO
86		Table B-4 Merced River at Cressey	Minimum discharge 1966 Water Year — Month	7	8
130		Table B-7 Turlock Irrigation District	Total acre-feet diverted - January	18033	1833
			Average cubic feet per second	293	29.8
			Monthly use in percent of seasonal	3.5	0.4
			Total Diversion	516577	500377
			Average cubic feet per second	714	691
133		Table B-9 Exports from Tuolumne River	Total acre-feet — Oct.	15655	15696
			Nov.	12685	12721
			Dec.	14987	15023
			Jan.	7812	7851
			Feb.	11913	11946
			March	15566	12607
			April	11060	11106
			May	15208	15260
			June	18388	18438
			July	21398	21462
			Aug.	21312	21379
			Sept.	19498	19552
			Total	185482	183041
		Bulletin No. 130-67 Hydrologic Data 1967 Volume IV, San Joaquin Valley			
122	255.34R	Table B-6 Sycamore Island Stock Ranch 5	Diversions — Sept.	40	17
			Total	278	255
		Bulletin No. 130-68 Hydrologic Data 1968 Volume IV, San Joaquin Valley			
104		Table B-5 Laguna Water District	Diversions — May		90
			June		110
			July		110
			Aug.		90
			Total		400
107	1.9 L 2.9 L	Table B-5 J. V. Steenstrup Estate	Name	J. V. Steen-strup Estate	John & Robert Bogetti
		Bulletin No. 130-69 Hydrologic Data 1969 Volume IV, San Joaquin Valley			
54		Table B-4 San Joaquin River near Dos Palos	Maximum Discharge 1969 Water Year — Month	3	6
			Day	11	16
			Time	2300	0800
			Gage Ht.	10.42	10.38
			Flow	5560	5900
78		Table B-4 Merced River below Snelling	Daily Mean Discharge Jan. 21	946	980
			Monthly Mean	189	190
			Monthly acre-feet	11620	11680
87		Table B-4 San Joaquin River at Maze Road Bridge	Maximum 1969 Water Year — Discharge	42800	45550
			Gage Ht.	36.46	36.87
			Time	0400	0300
			Maximum Discharge of record — CFS	42800	45550
			Gage Ht.	36.46	36.87
			Last line — Feet	37.00	38.31
			Hours	2400	2000
			Date	2-28-69	1-27-69
95		Table B-4 Tule River below Porterville	Maximum Discharge 1969 Water Year — Discharge		3066
			Gage Ht.		5.35
			Month		2
			Day		26
			Time		1200
130		Table B-12 San Joaquin River at Fremont Ford Bridge	Maximum Discharge of Record — CFS	8260b	9180b
			Gage Ht.	68.02	68.05
			Date	2-27-69	2-26-69
			Footnote a	Delete Entire Note	

TABLE B-10 (Cont.)

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS

LOCATION OF ERROR			ITEM	CHANGE	
PAGE	MILE & BANK	NAME		FROM	TO
133		Table B-12 San Joaquin River near Newman	Maximum Discharge of Record CFS	33300a	34700a
140		Table B-12 San Joaquin River at Maze Road Bridge	Maximum Discharge of Record Gage Ht.	37.00a	38.31a
			Date	2-28-69	1-27-69
		Bulletin No. 130-70 Hydrologic Data 1970 Volume IV, San Joaquin Valley			
95		Table B-4 Woods-Central Ditch near Porterville	Daily Mean Discharge June 5	132.0	27.5
			Monthly Acre-feet	7604	7397
			Water Year Total	43386	43179
102		Table B-6 Firebaugh Canal Company	Diversion for April	9657	7370
		Firebaugh Canal Company	Total Diversion for Year	51595	49308
		Fremont Ford Bridge to Gravelly Ford	Total for Reach	897796	895509
108		Table B-6 Woods-Central Ditch	Diversions June	7604	7397
			Total	43386	43179
117		Table B-11 San Joaquin River at Fremont Ford Bridge	Maximum Discharge of record CFS	8260b	9180b
			Gage Ht.	68.02	68.05
			Date	2-27-69	2-26-69
			Footnote a	Delete Entire Note	
120		Table B-11 San Joaquin River near Newman	Maximum Discharge of Record CFS	33300a	34700a

APPENDIX C

GROUND WATER MEASUREMENTS

The Department of Water Resources cooperates with the U. S. Geological Survey, U. S. Bureau of Reclamation, irrigation and water storage districts, and other local agencies for the systematic observation of ground water levels. The Department obtains approximately 13,000 water level measurements annually on some 7,500 wells in the San Joaquin Valley. The period of record for these wells varies from one to over 40 years. In preparation of the ground water maps most of the well measurements were used. However, because significant trends in water level fluctuations can be indicated by a representative sample, a selection was made of approximately 500 wells for reporting of actual measurements.

This appendix presents ground water measurement data on these wells for the period October 1, 1972, through September 30, 1973. These wells were selected as being representative of all the wells measured in the area and are designated as selected wells. Their selection is based on a number of factors, including areal distribution, length of water level record, frequency of measurements, conformity with respect to water level fluctuation in the ground water basin or area in a confined aquifer, or in a zone of shallow depth, and availability of a log, mineral analyses, and production record.

Two numbering systems are used by the Department to facilitate processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System as described below.

The regions used in this report are geographic areas defined in Section 13040 of the Water Code. That portion of California covered by this volume comprises the southern portion of Central Valley Region No. 5. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and district or area as follows:

5-22.15

Region (Central Valley Region)

Ground Water Basin (San Joaquin Valley)

District or area (Fresno Irrigation District)

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

13S / 19E - 16 K 01 M

Township

Range

Section

Tract

Sequence Number

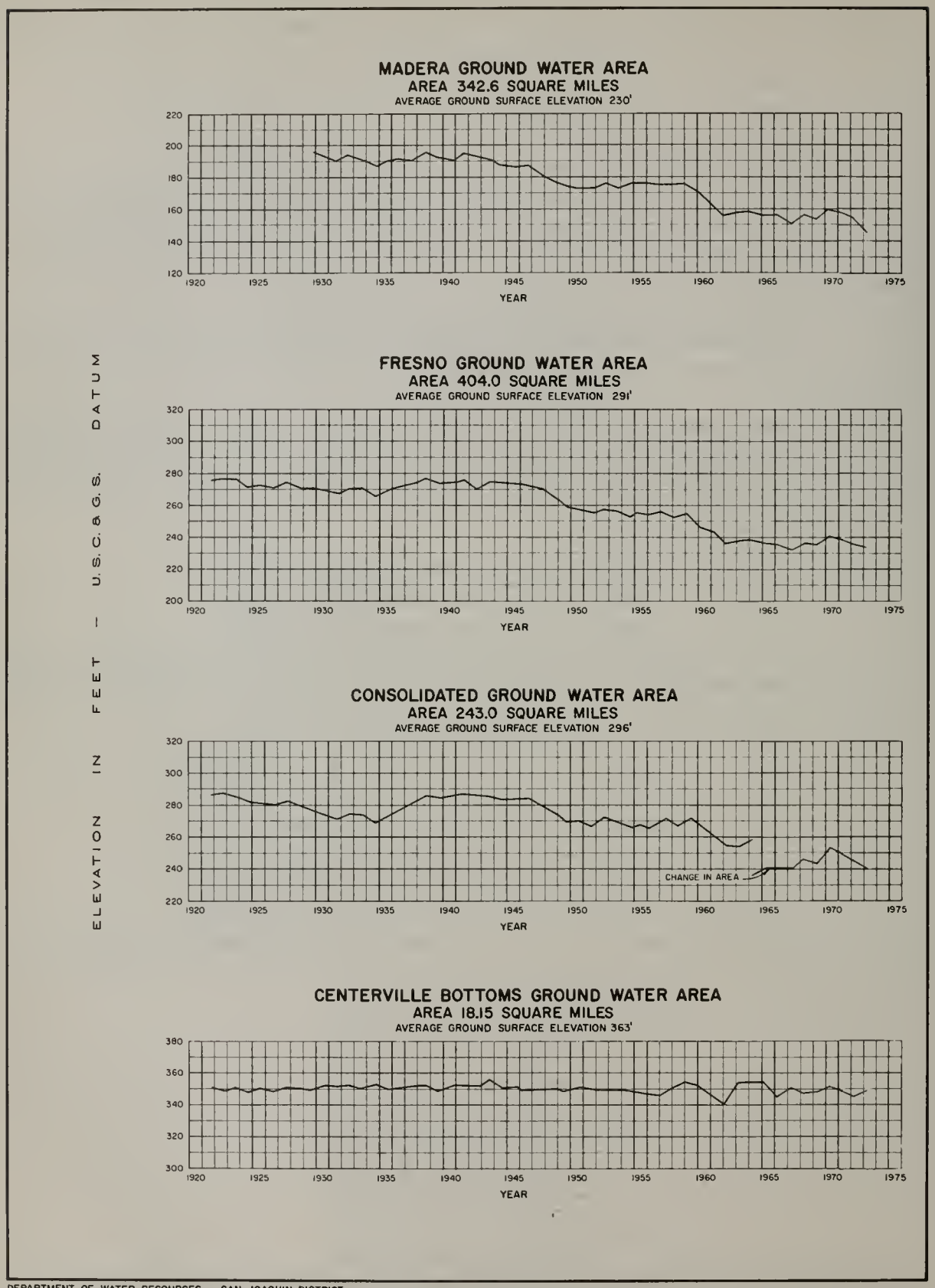
Base and Meridian (M) Mount Diablo (S) San Bernardino

This number identifies and locates the well. In the example, the well is in Township 13 South, Range 19 East, Tract K of Section 16, located in the Mount Diablo Base and Meridian. A section is divided into 40-acre tracts as follows:

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

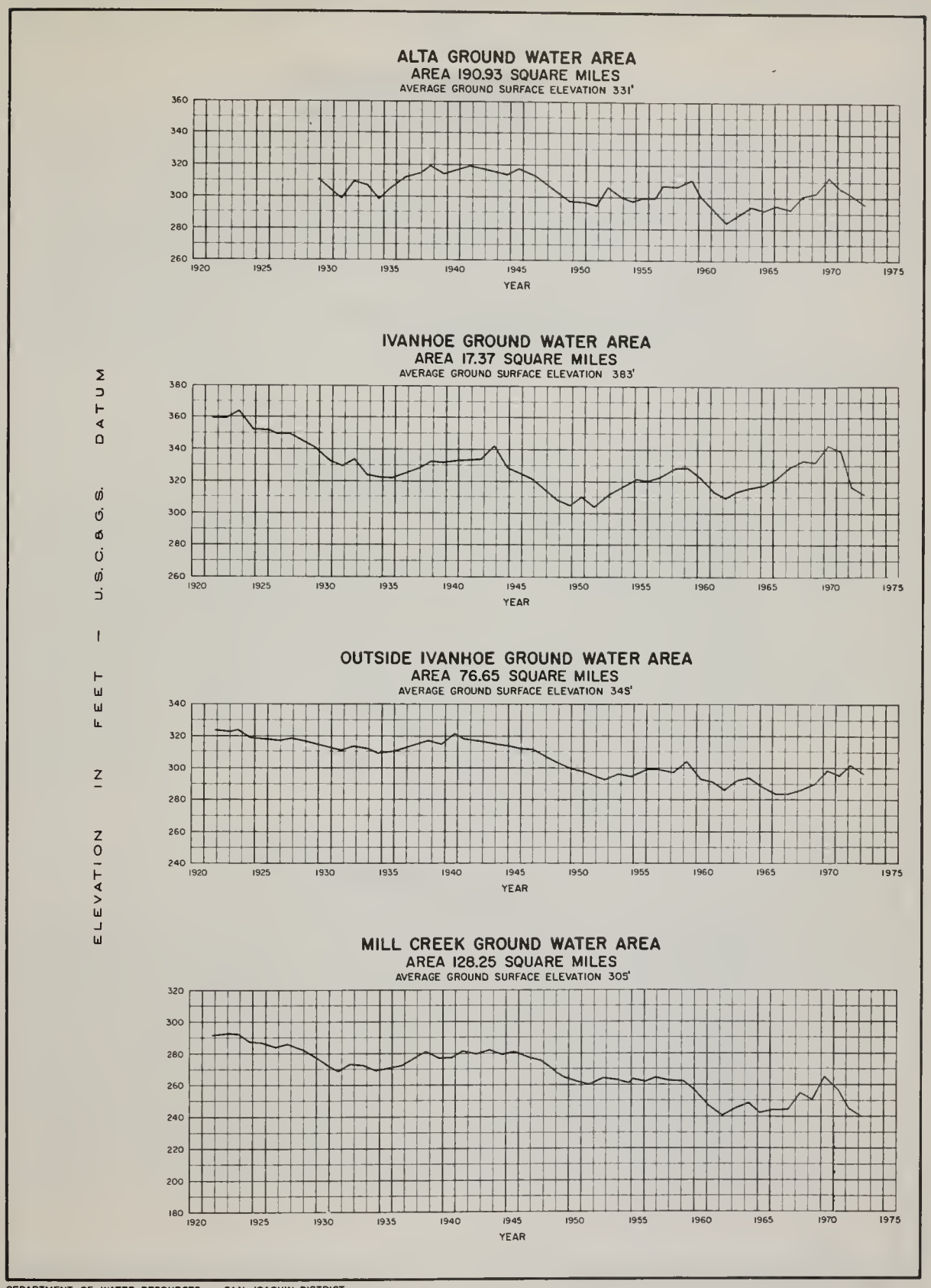
Sequence numbers in a tract are generally assigned in chronological order. The example designates the first well to be assigned a number in Tract K.

Figure C-I. FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS



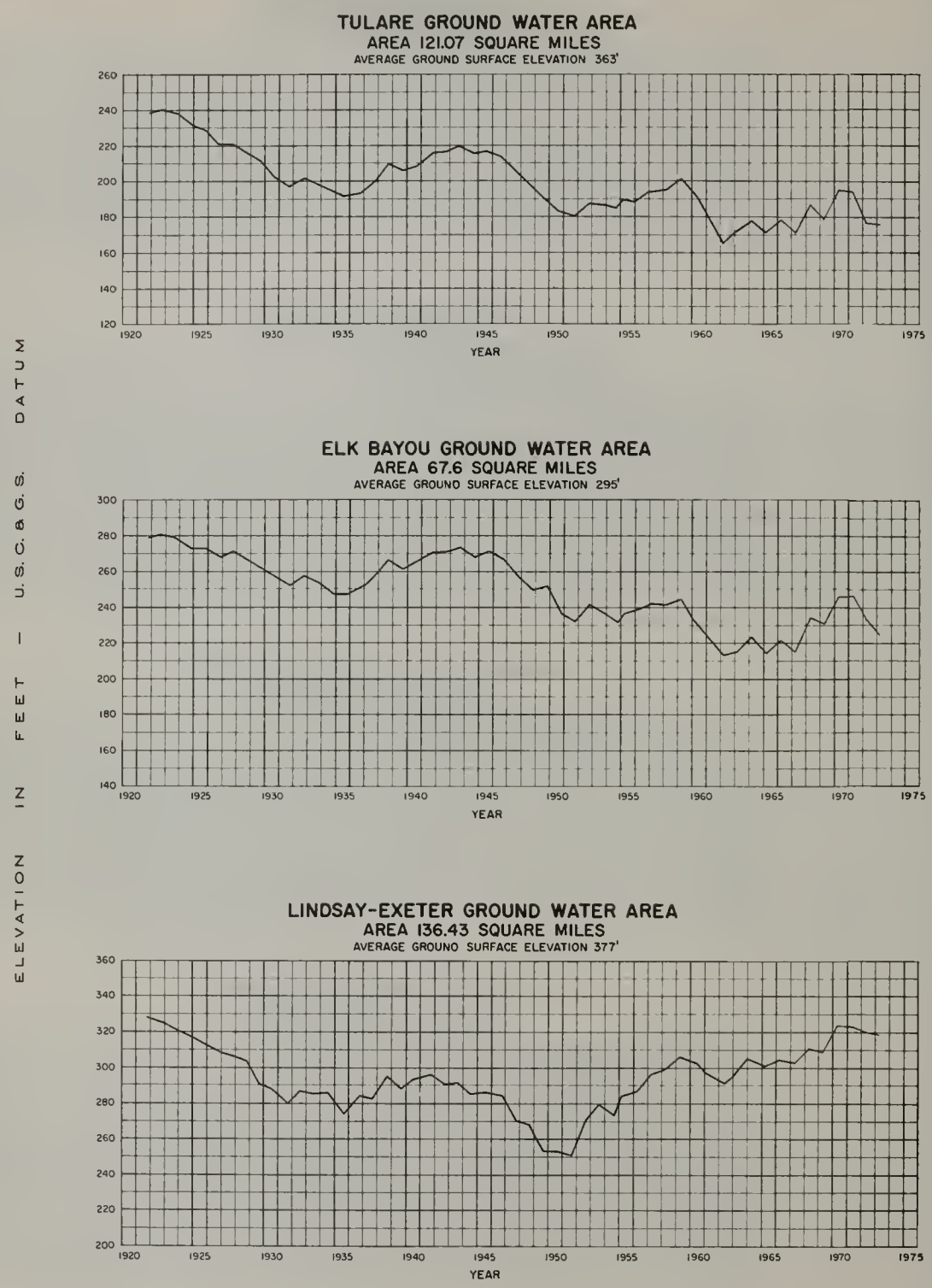
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-1 (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS



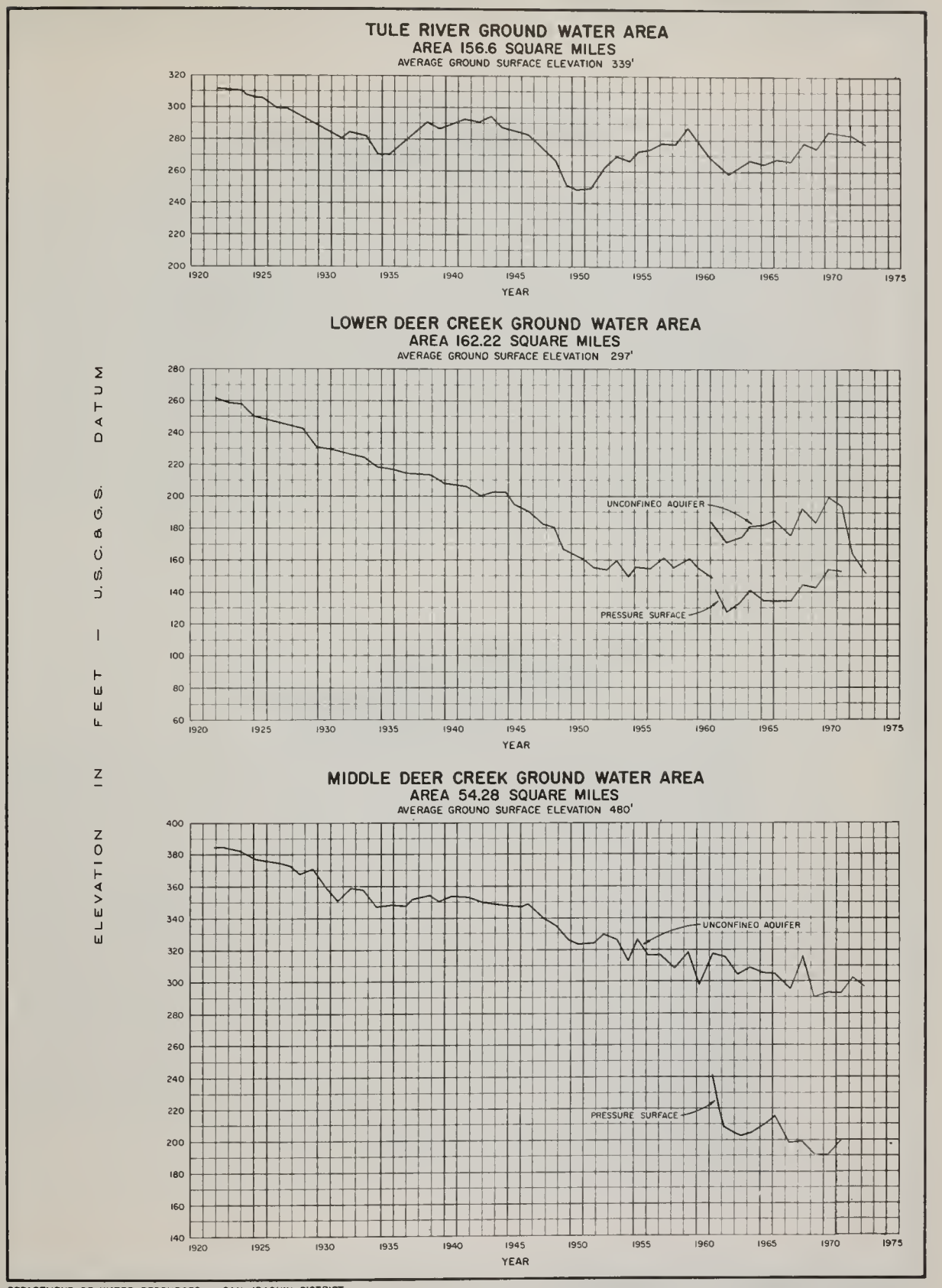
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-I (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS



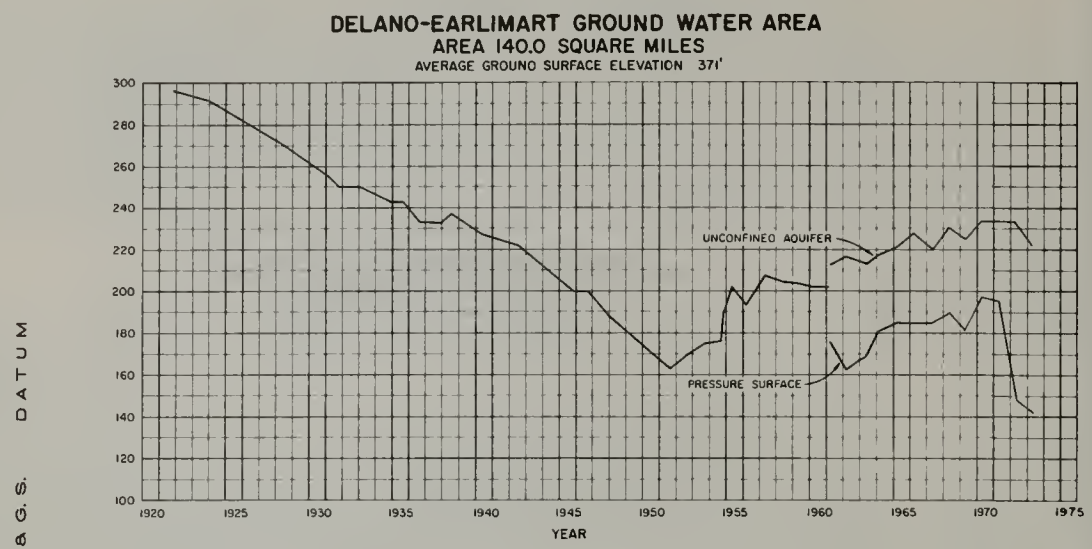
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

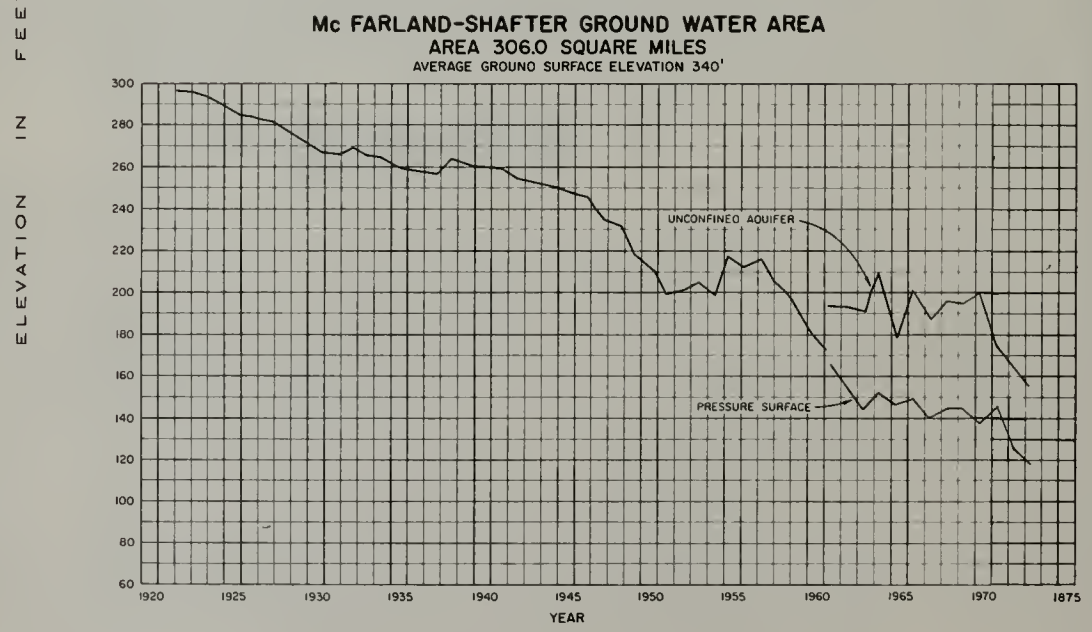
Figure C-1 (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS



DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-I (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS

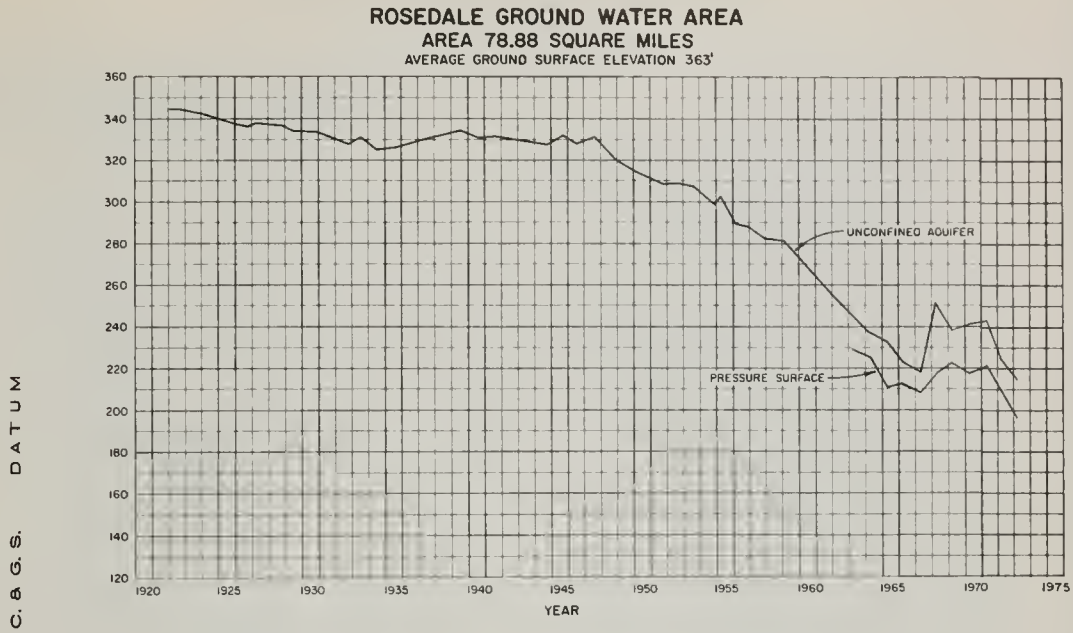


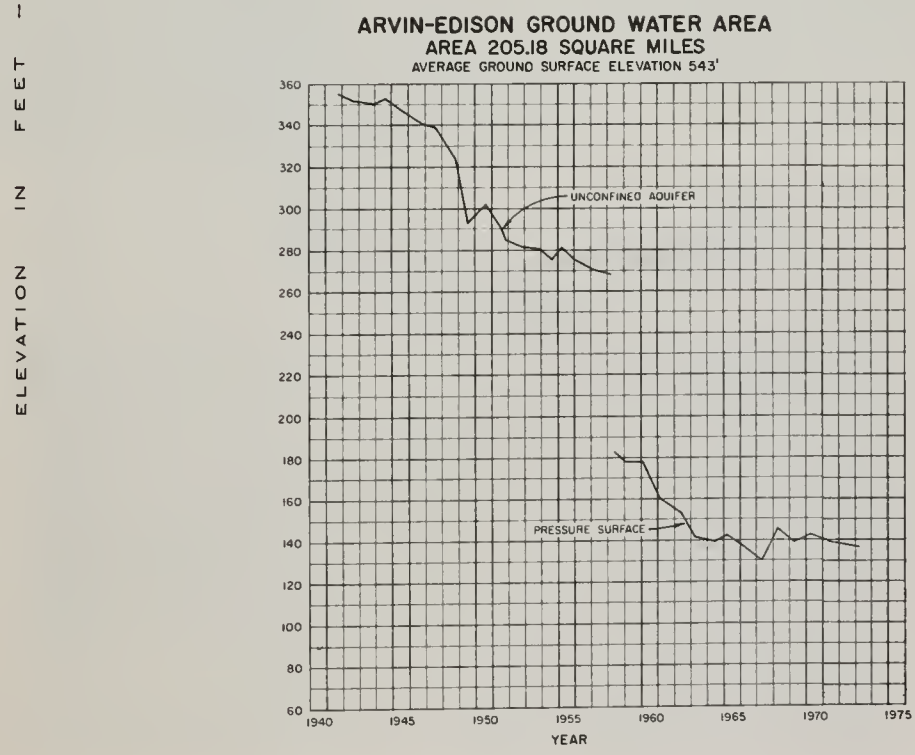


ELEVATION IN FEET — U.S.C.&G.S. DATUM

DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-I (Continued). FLUCTUATION OF AVERAGE WATER LEVEL IN SELECTED AREAS

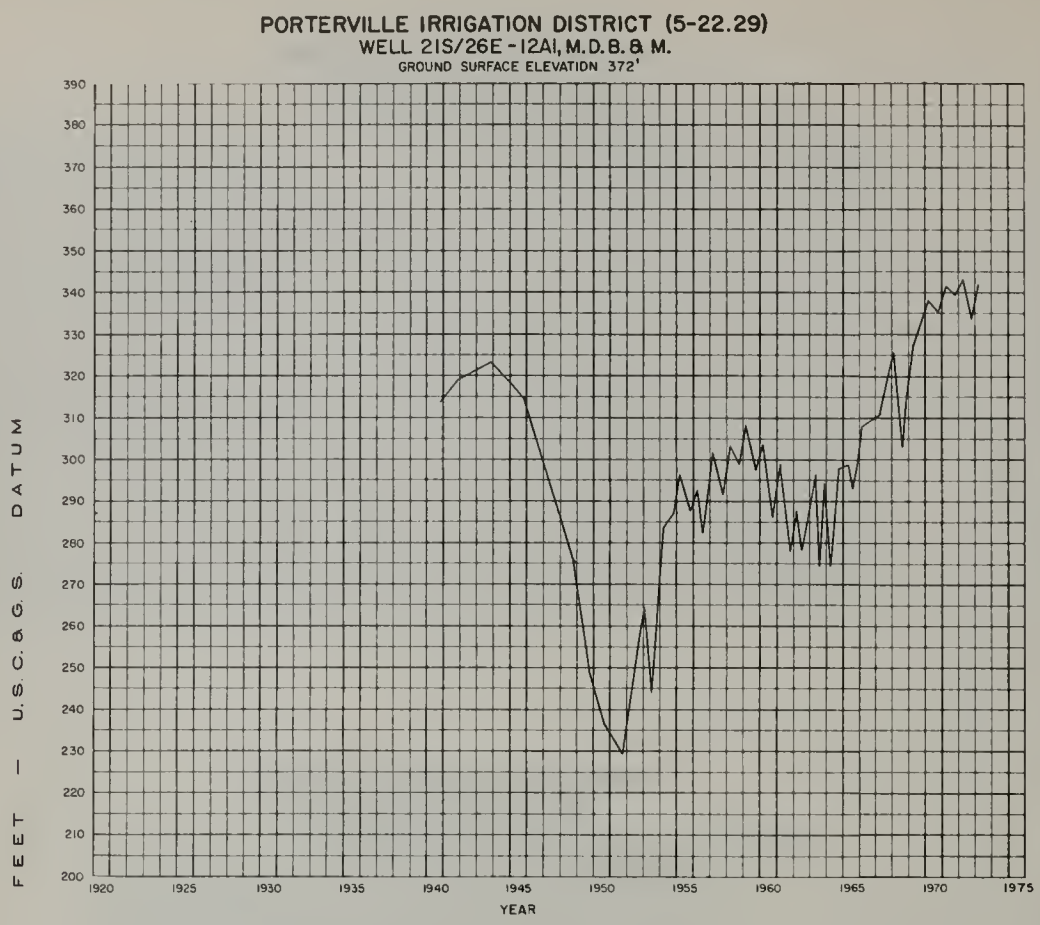


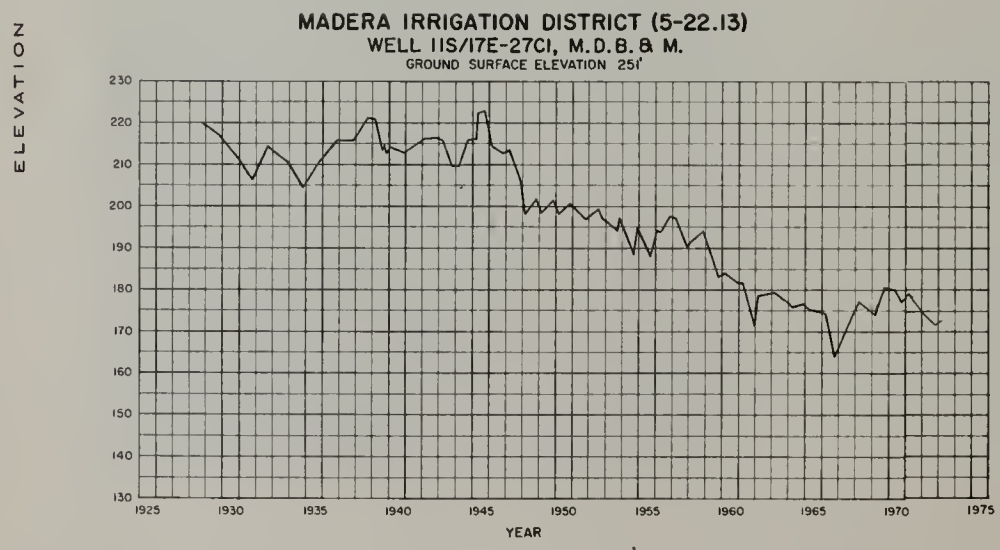


ELEVATION IN FEET - U.S.C.&G.S. DATUM

DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

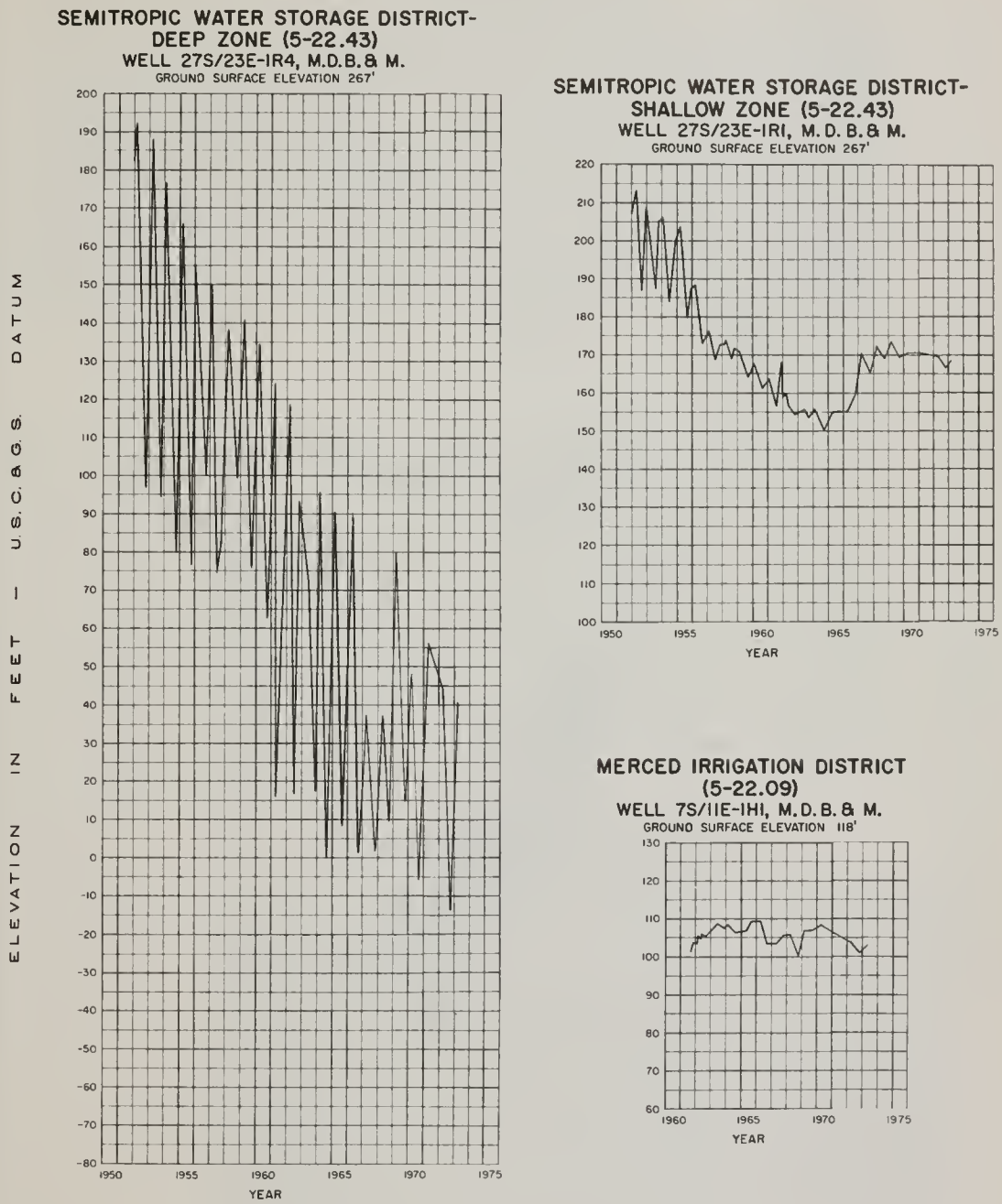
Figure C-2. FLUCTUATION OF WATER LEVELS IN SELECTED WELLS





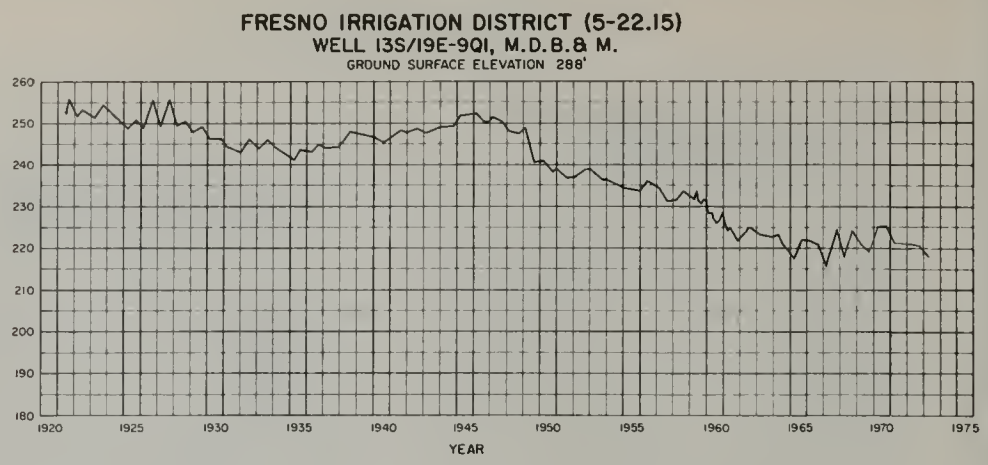
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

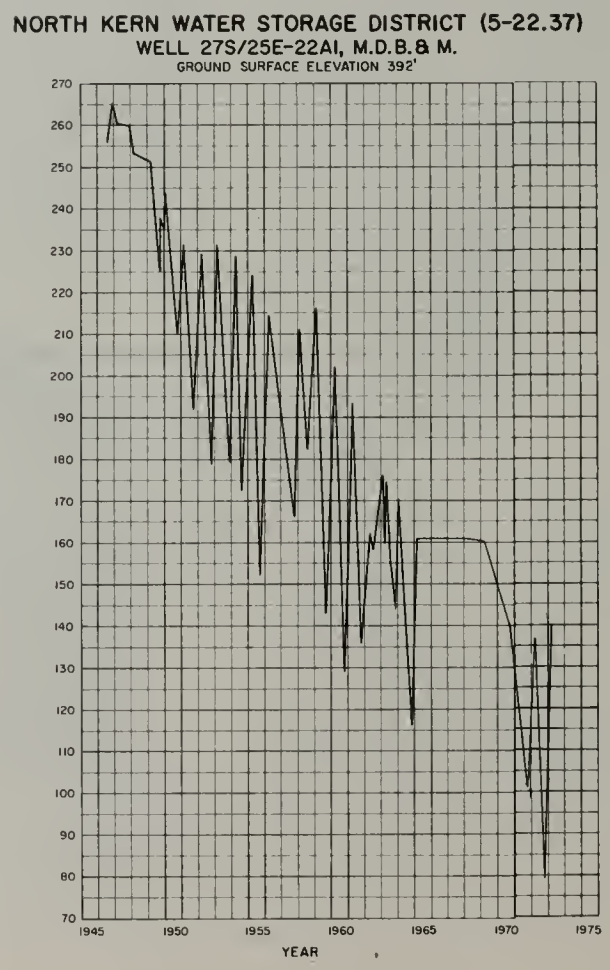
Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

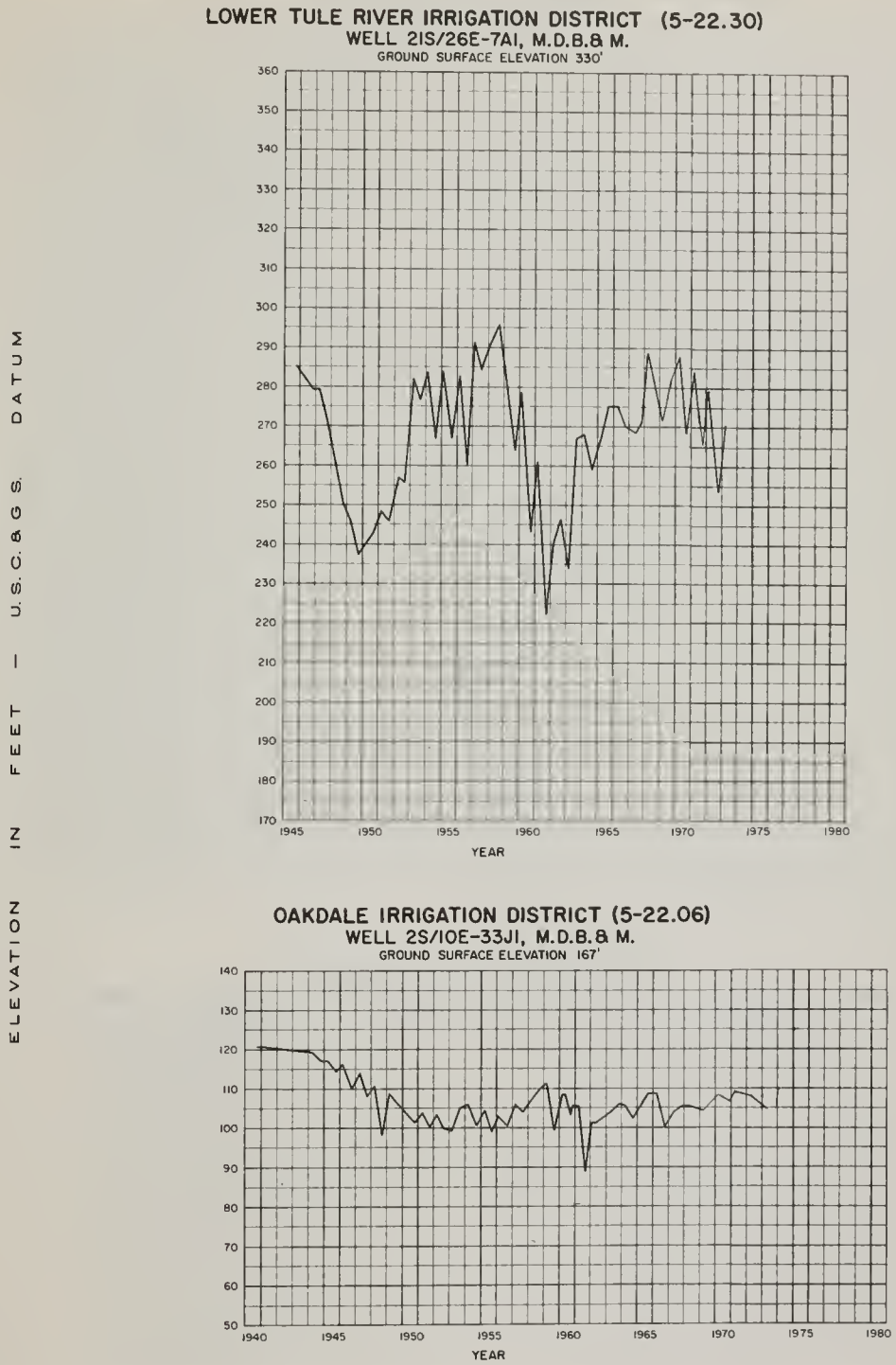




ELEVATION IN FEET – U.S.C.&G.S. DATUM

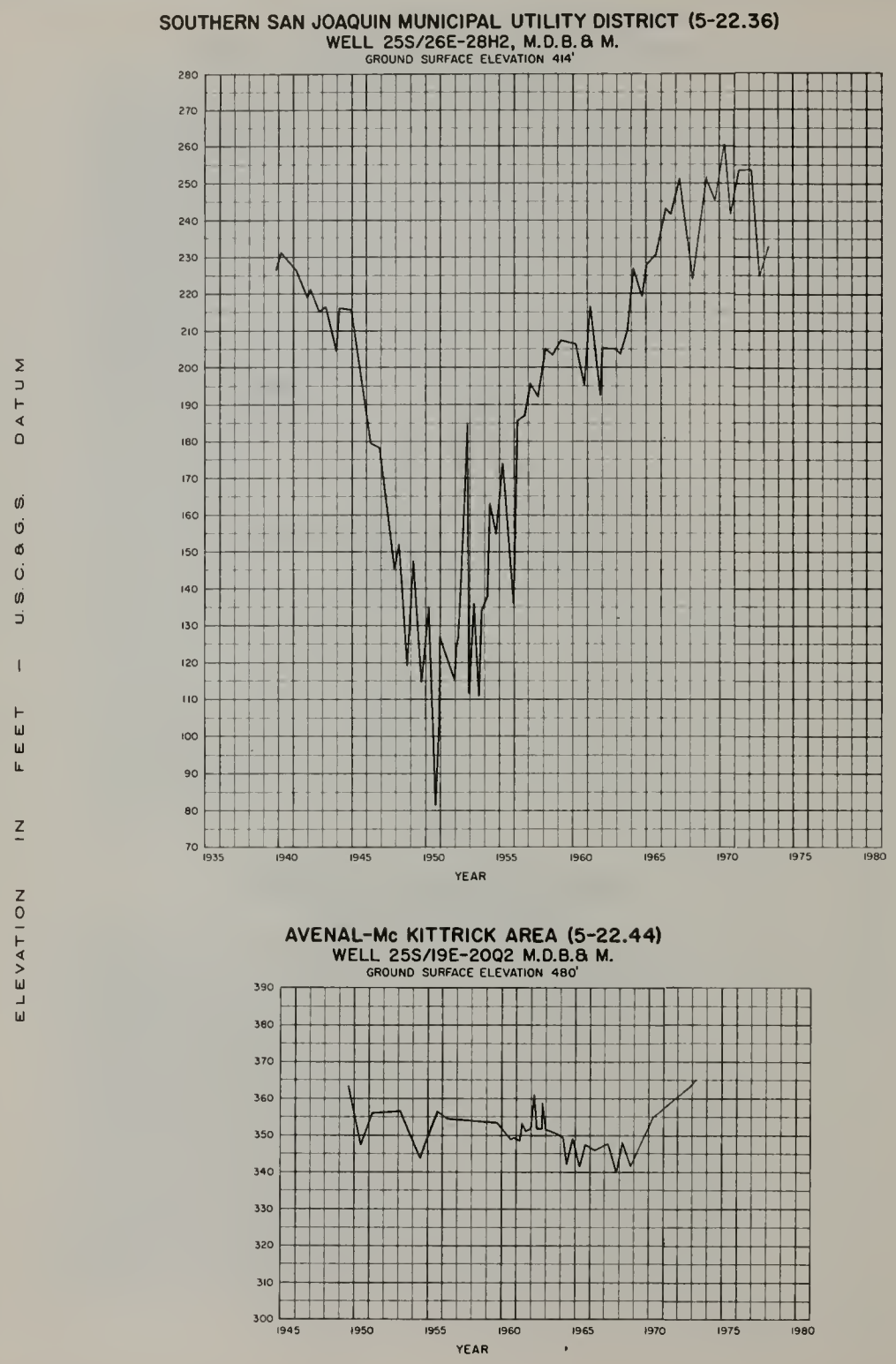
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



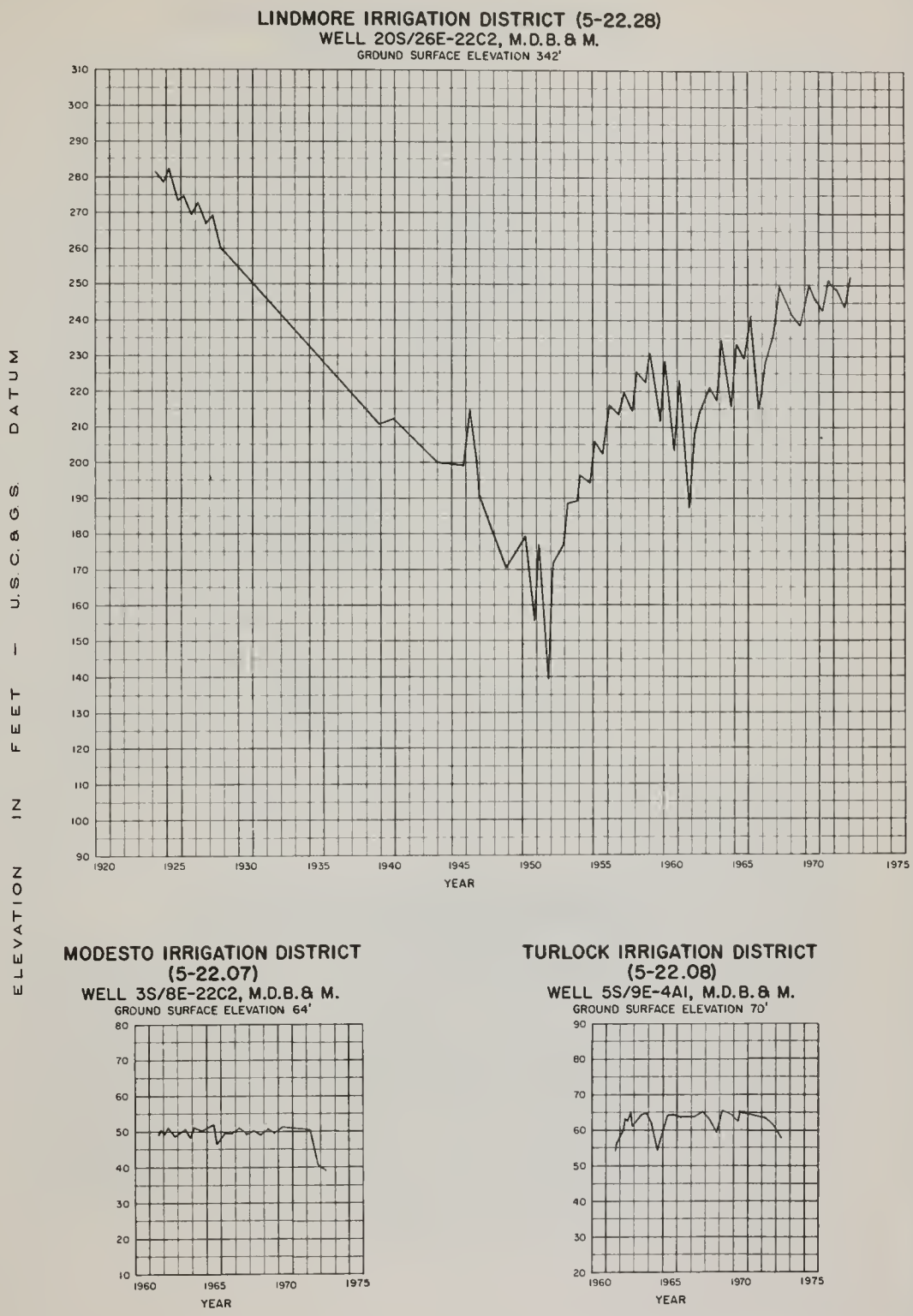
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



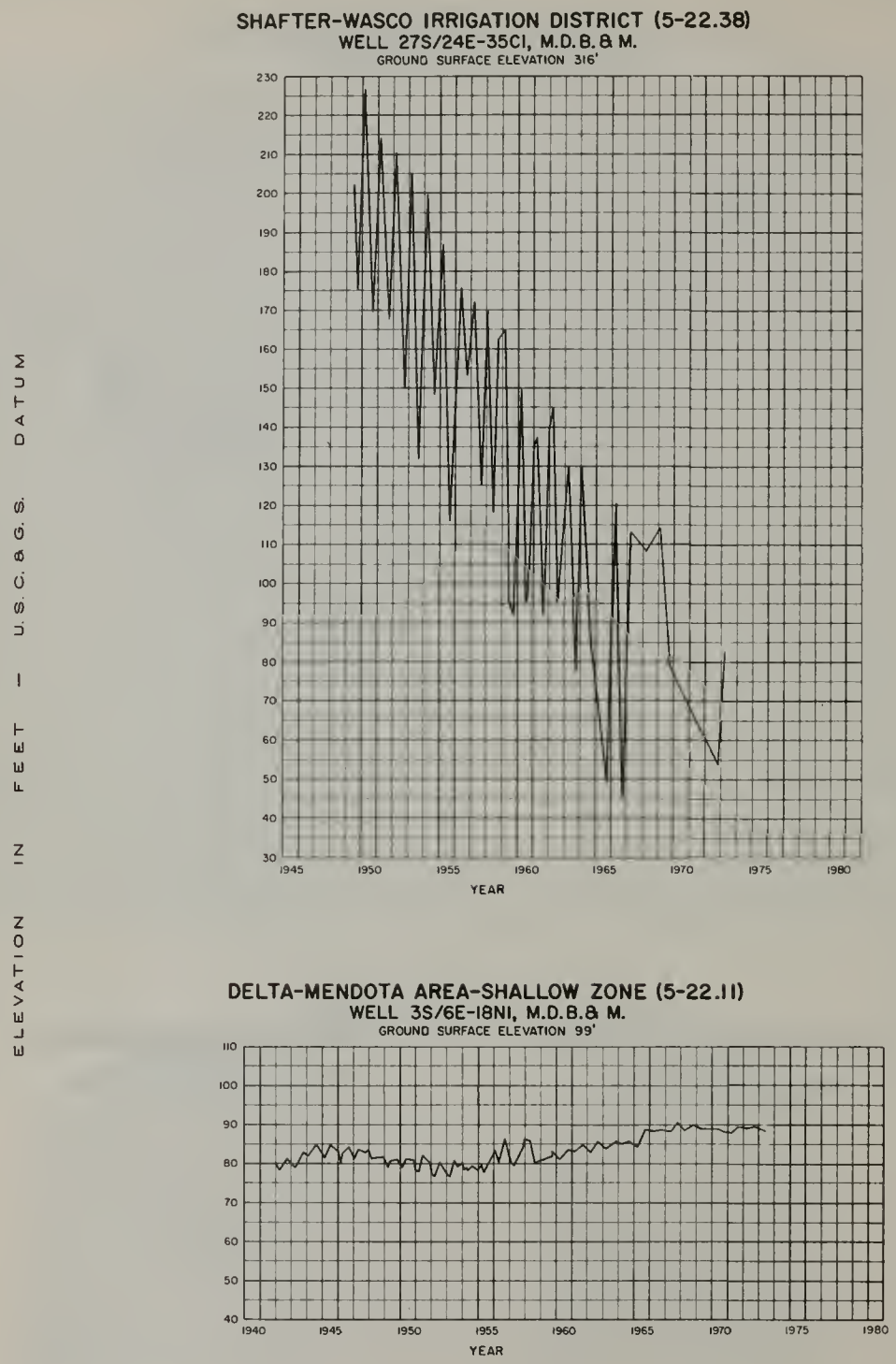
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



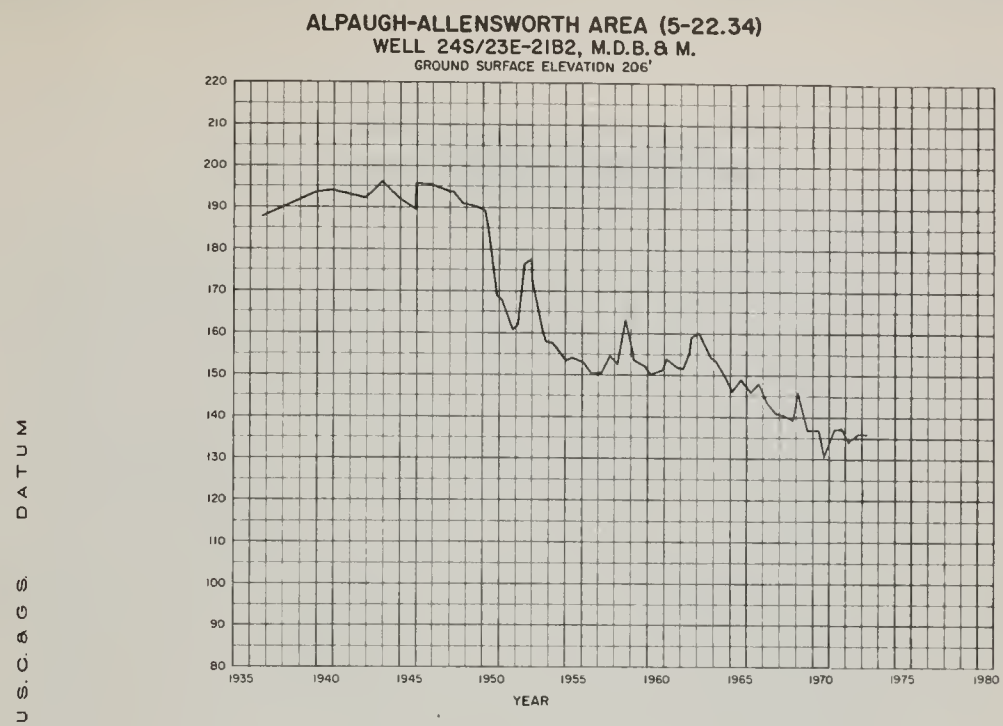
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

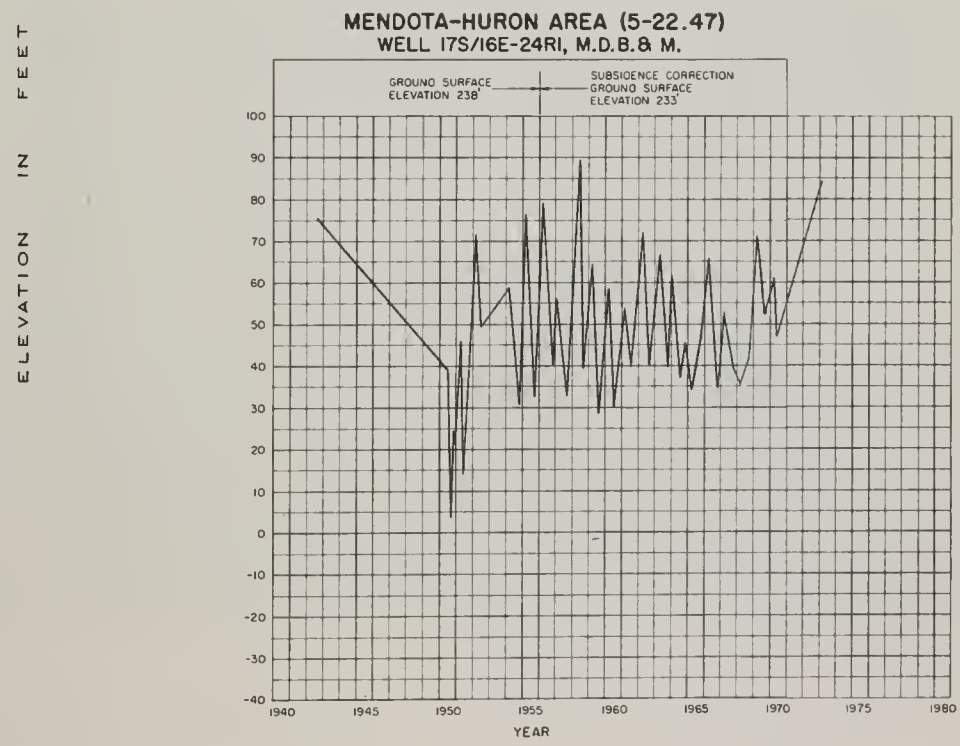
Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

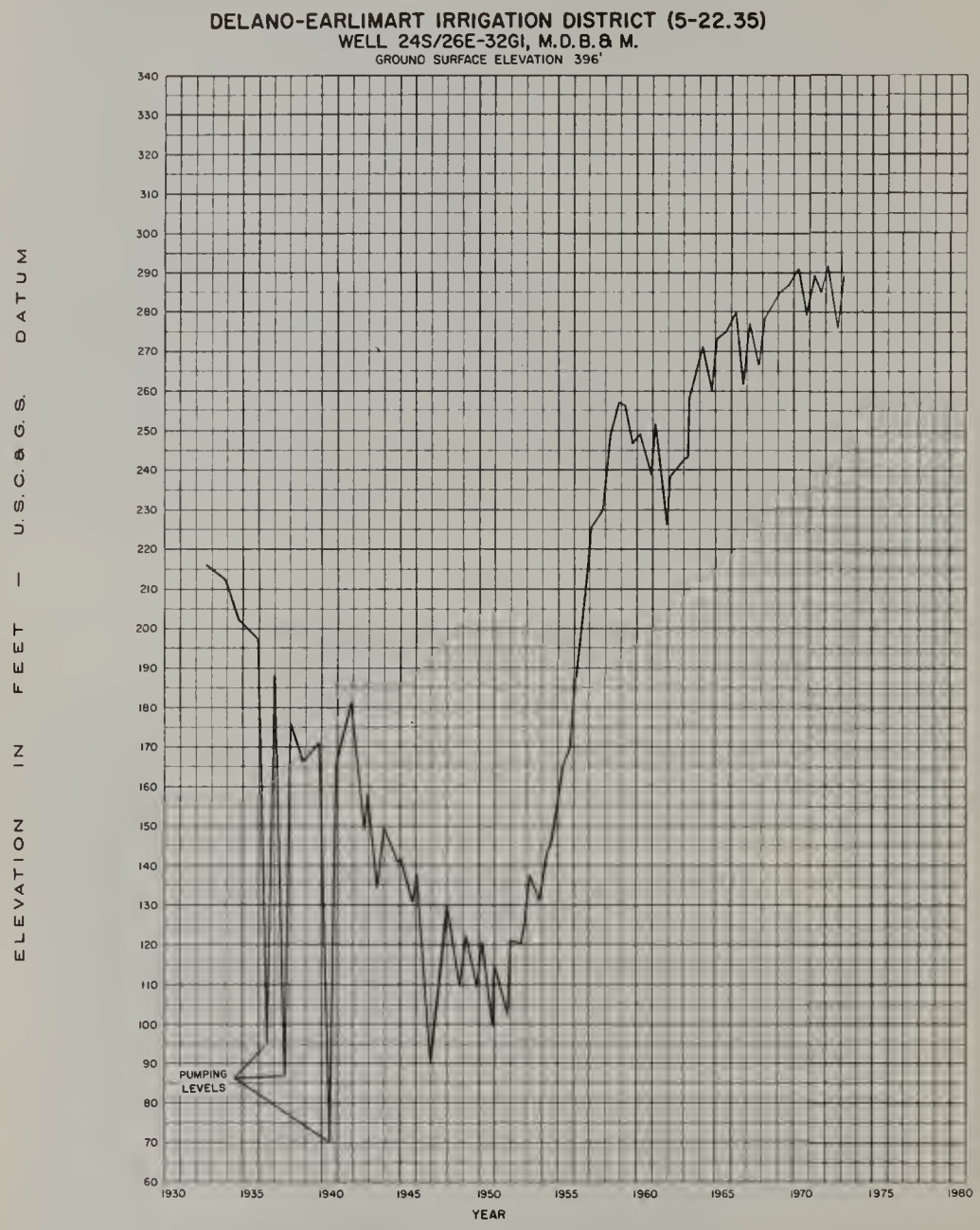




ELEVATION IN FEET - U.S.C.&G.S. DATUM

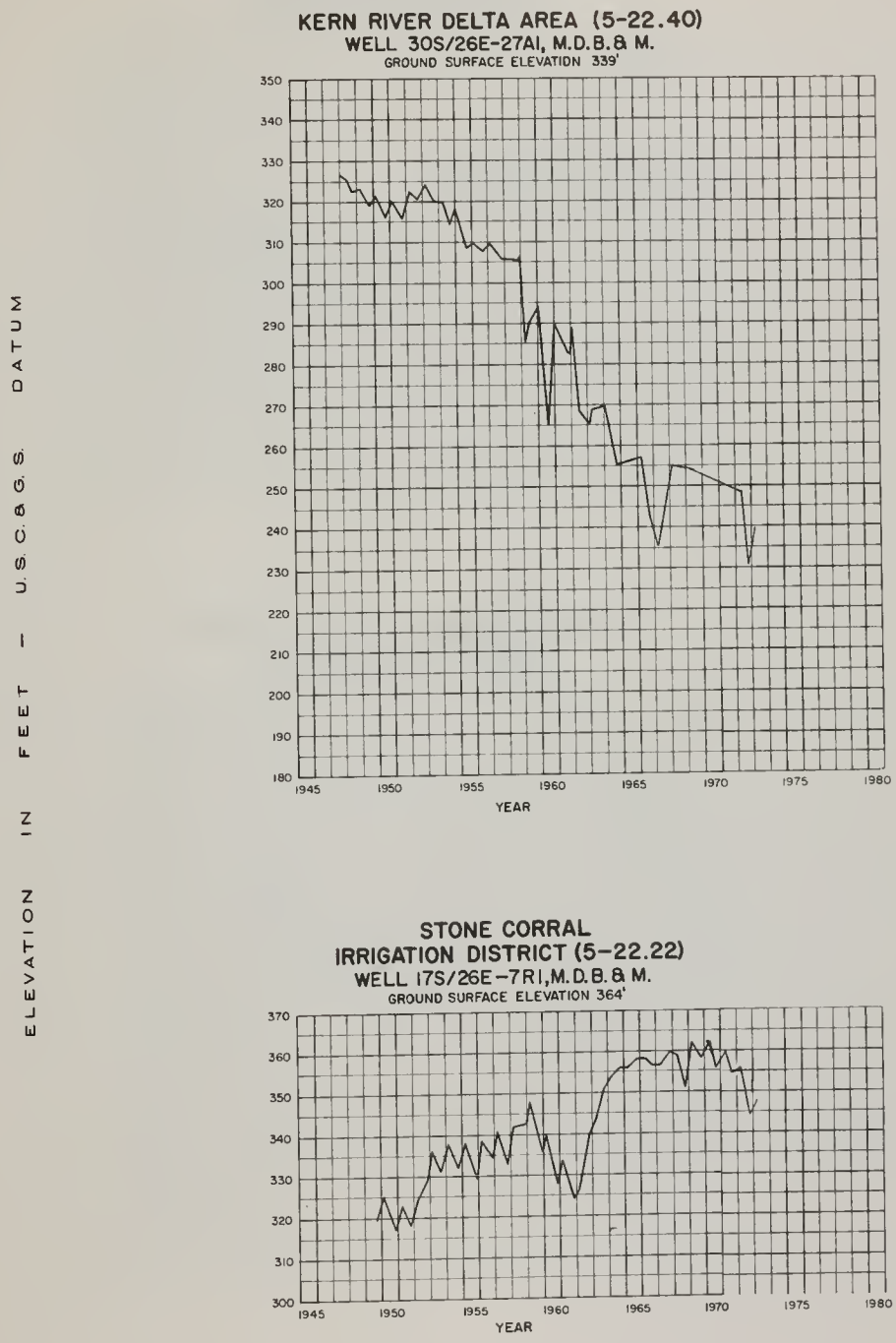
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

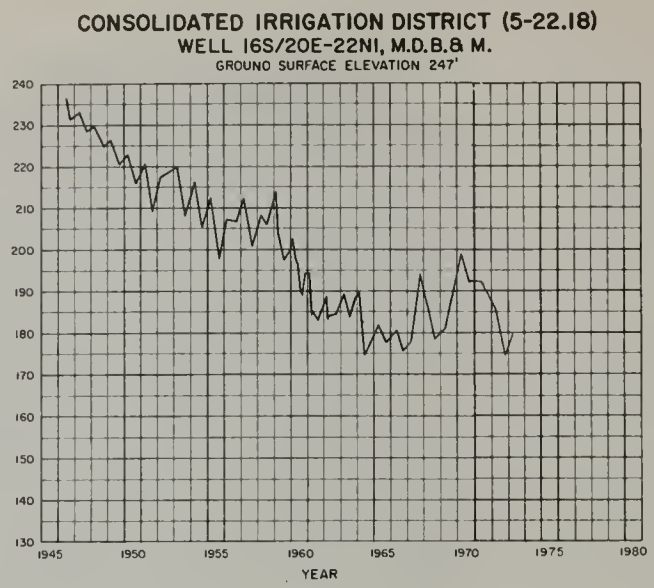
Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

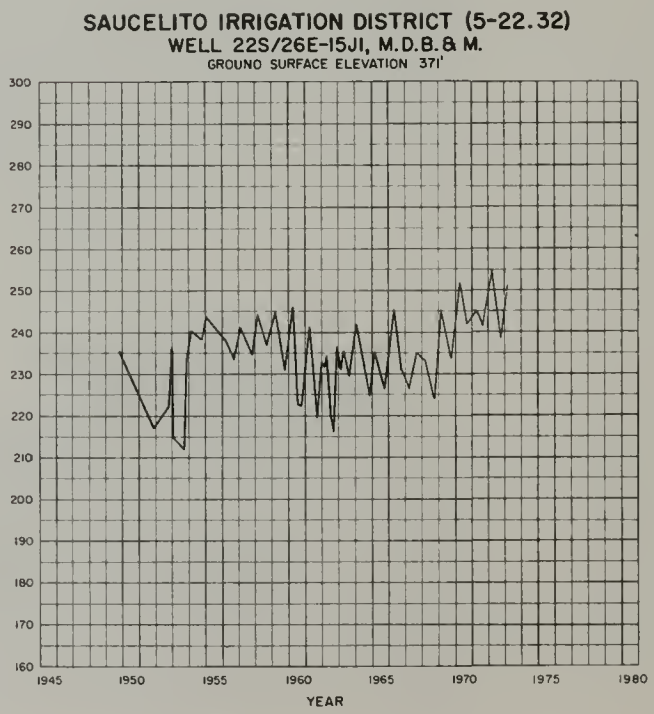


DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

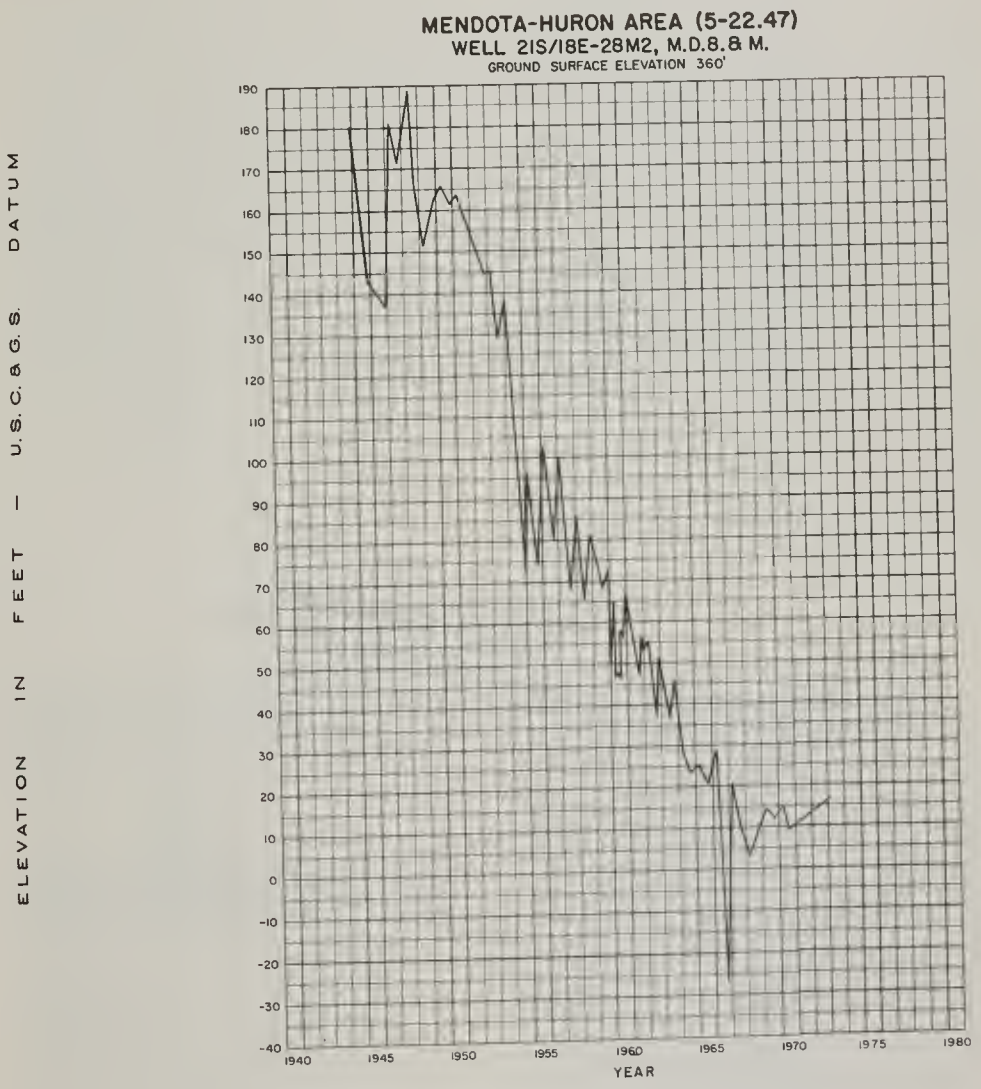
ELEVATION IN FEET — U.S.C.&G.S. DATUM





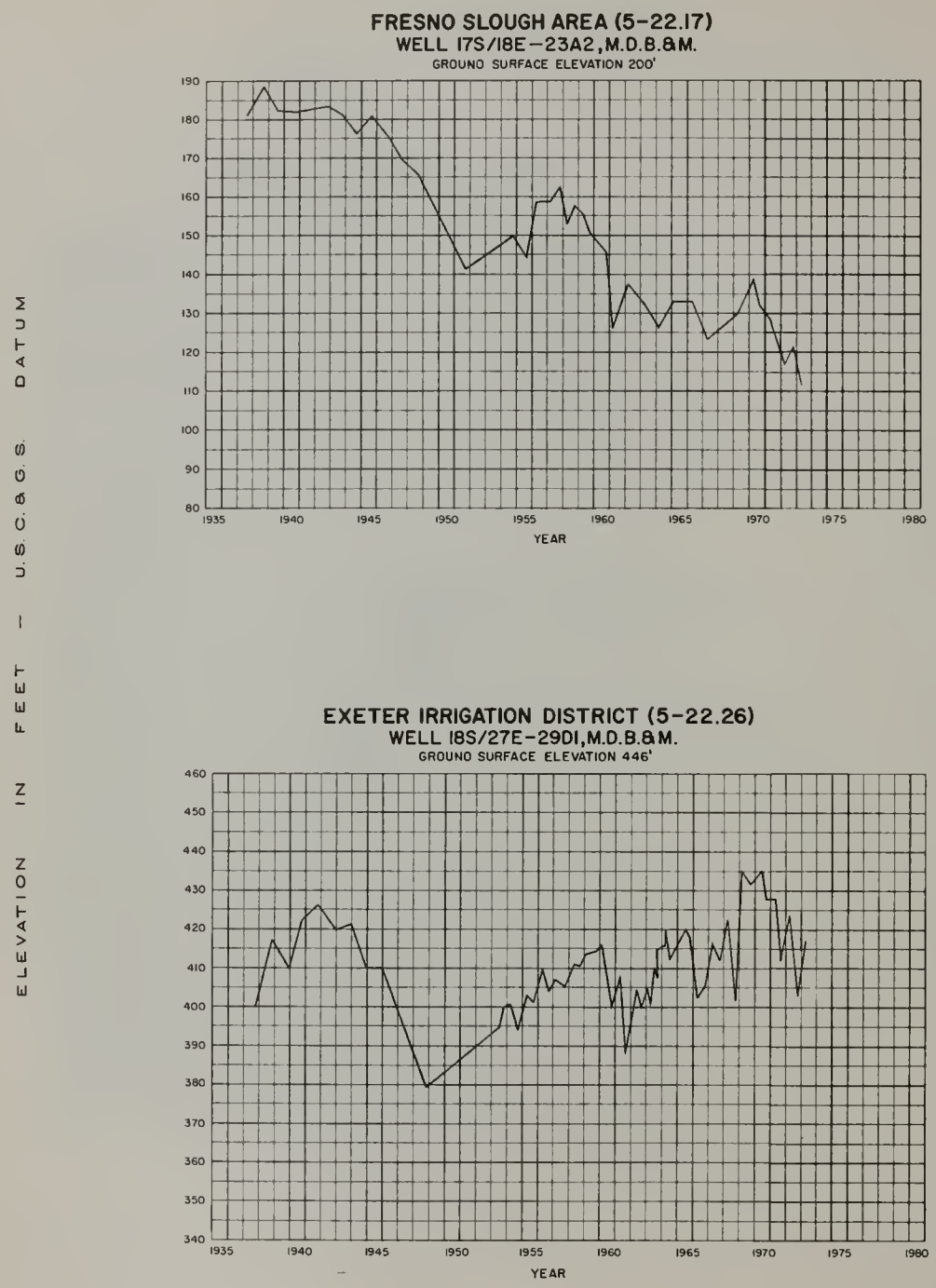
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



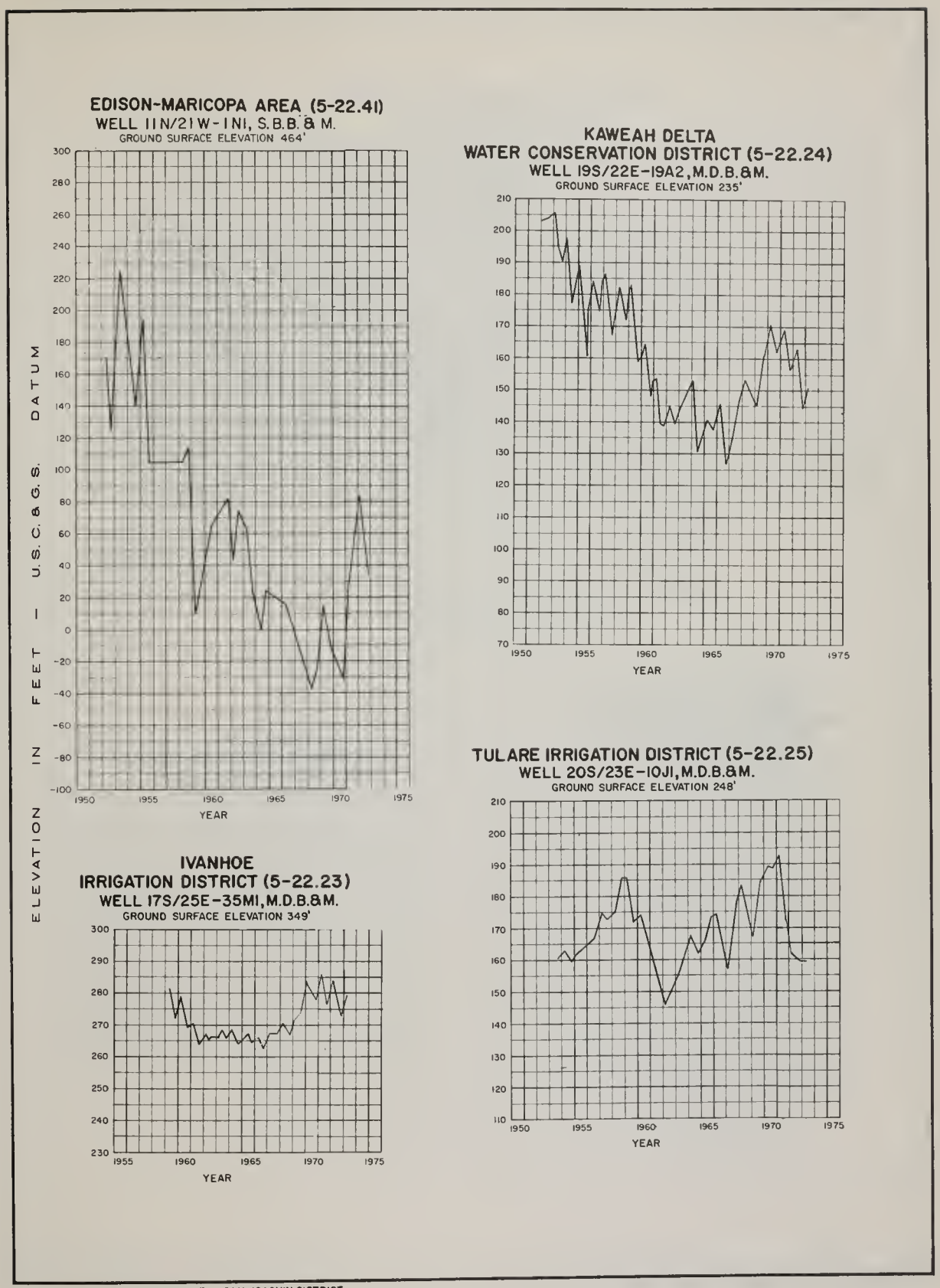
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

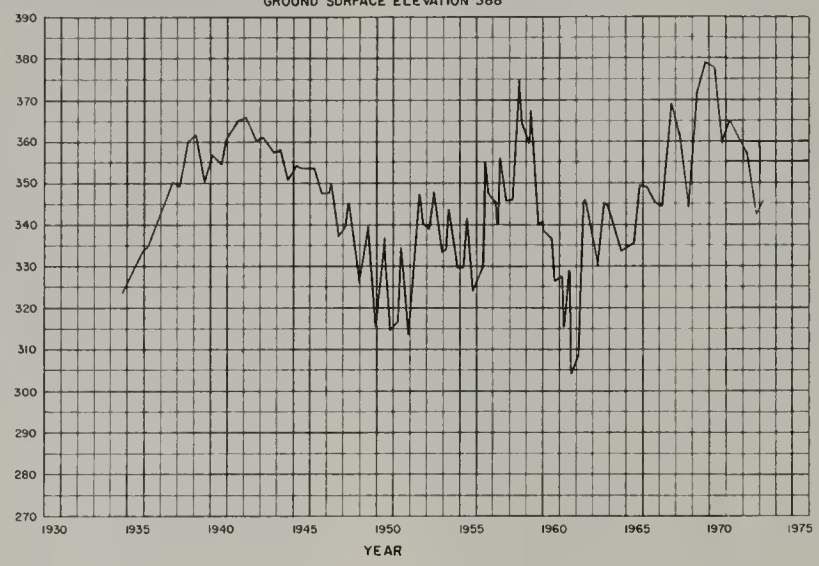
Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

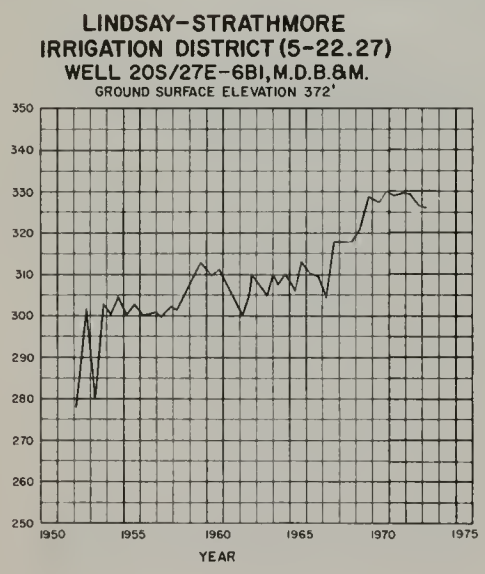


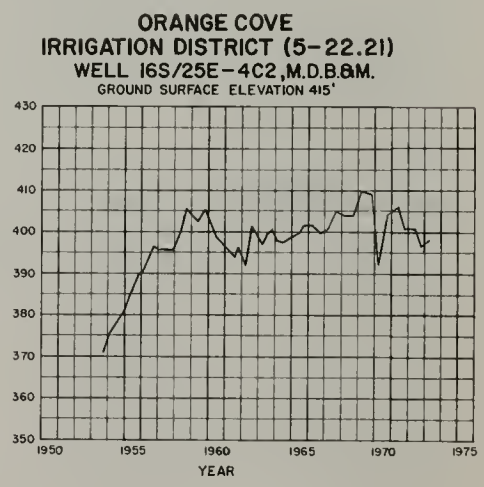
DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS

ELEVATION IN FEET — U.S.C.&G.S. DATUM

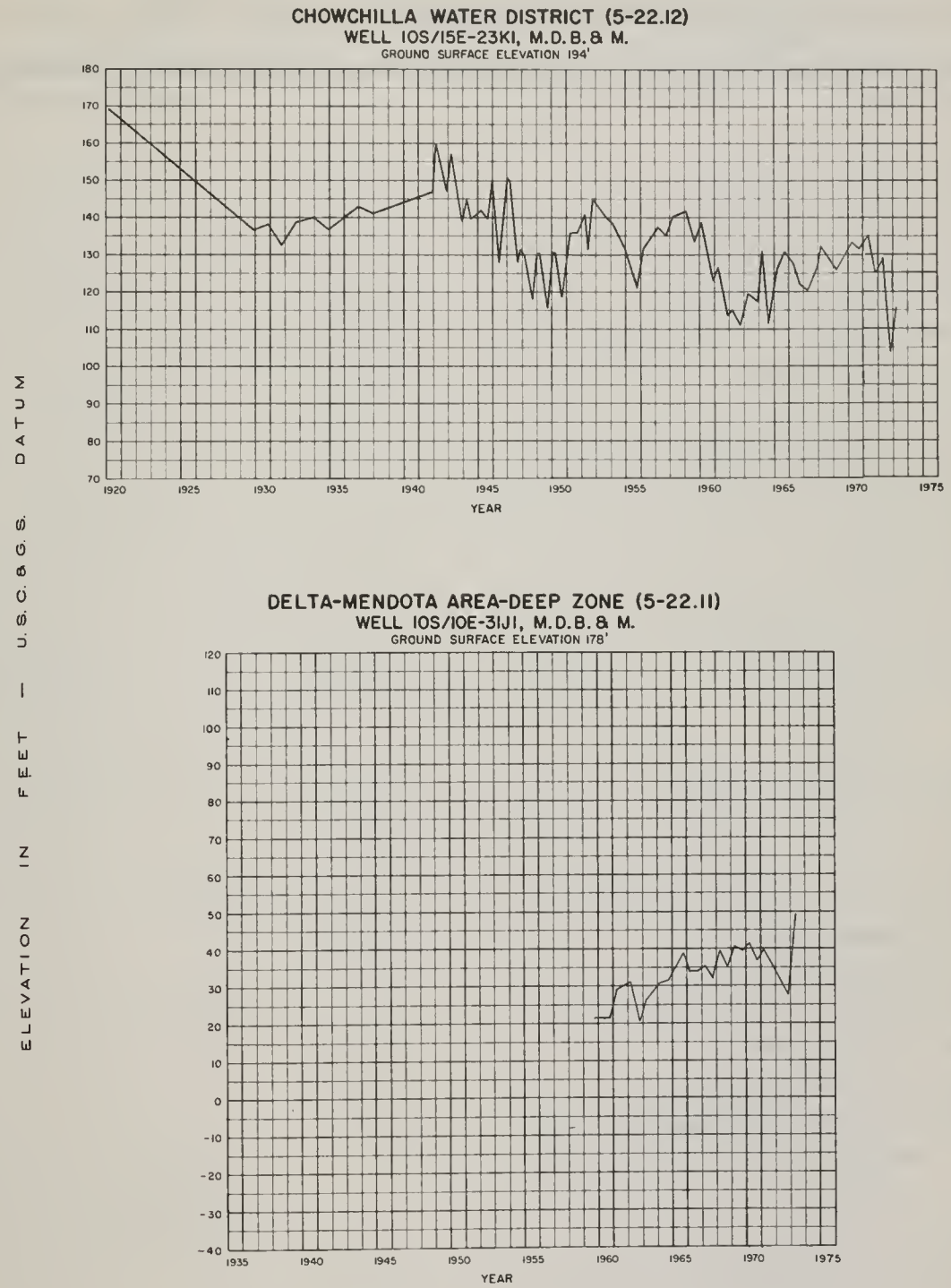






DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

Figure C-2 (Continued). FLUCTUATION OF WATER LEVELS IN SELECTED WELLS



DEPARTMENT OF WATER RESOURCES SAN JOAQUIN DISTRICT

TABLE C-1

CHANGE IN AVERAGE GROUND WATER LEVEL
IN DISTRICTS OR AREAS IN THE SAN JOAQUIN VALLEY
Spring 1972 - Spring 1973

Ground Water Districts or Areas		Number of Wells Considered in Analysis[a]	Change in Feet
Name	Number		
San Joaquin Valley	5-22.00		
Oakdale Irrigation District	5-22.06		- 1.7
Modesto Irrigation District	5-22.07		- 1.2
Turlock Irrigation District	5-22.08		+ 0.5
Merced Irrigation District	5-22.09		+ 0.9
El Nido Irrigation District	5-22.10		- 5.1
Delta-Mendota Area	5-22.11	258	+ 2.5
Chowchilla Water District	5-22.12		-13.0
Madera Irrigation District	5-22.13		- 4.1
West Chowchilla-Madera Area	5-22.14		- 4.5
Fresno Irrigation District	5-22.15		- 5.6
City of Fresno	5-22.16	60	+ 0.1
Fresno Slough Area	5-22.17		+ 3.3
Consolidated Irrigation District	5-22.18		- 5.3
Alta Irrigation District	5-22.19		- 8.0
Lower Kings River Area	5-22.20		
Shallow Zone			+ 1.4
Deep Zone			- 1.8
Orange Cove Irrigation District	5-22.21	65	- 2.3
Stone Corral Irrigation District	5-22.22	10	- 2.9
Ivanhoe Irrigation District	5-22.23		- 6.1
Kaweah-Delta Water Conservation District	5-22.24		- 7.9
Tulare Irrigation District	5-22.25		- 3.0
Exeter Irrigation District	5-22.26		- 7.8
Lindsay-Strathmore Irrigation District	5-22.27		- 0.1
Lindmore Irrigation District	5-22.28		+ 2.3
Porterville Irrigation District	5-22.29	17	- 4.9
Lower Tule River Irrigation District	5-22.30		
Shallow Zone			- 6.4
Deep Zone		Insufficient data to compute change.	
Vandalia Irrigation District	5-22.31	6	+ 1.5
Saucelito Irrigation District	5-22.32		
Shallow Zone			- 9.4
Deep Zone		Insufficient data to compute change.	
Pixley Irrigation District	5-22.33		
Shallow Zone			- 7.9
Deep Zone			- 4.1

TABLE C-1 (Cont.)

CHANGE IN AVERAGE GROUND WATER LEVEL
IN DISTRICTS OR AREAS IN THE SAN JOAQUIN VALLEY
Spring 1972 - Spring 1973

Ground Water Districts or Areas		Number of Wells Considered in Analysis[a]	Change in Feet
Name	Number		
San Joaquin Valley (Continued)			
Alpaugh-Allensworth Area	5-22.34		
Shallow Zone			- 1.8
Deep Zone			-14.3
Delano-Earlimart Irrigation District	5-22.35		
Shallow Zone			-17.5
Deep Zone		Insufficient data to compute change	
Southern San Joaquin Municipal Utility District	5-22.36		
Shallow Zone			- 4.8
Deep Zone			- 9.6
North Kern Water Storage District	5-22.37		
Shallow Zone			-29.8
Deep Zone			-12.3
Shafter-Wasco Irrigation District	5-22.38		
Deep Zone			- 6.9
City of Bakersfield	5-22.39	19	- 7.6
Kern River Delta Area	5-22.40		
Shallow Zone			-13.5
Deep Zone		Insufficient data to compute change.	
Edison-Maricopa Area	5-22.41		
Deep Zone			-23.0
Buena Vista Water Storage District	5-22.42		
North Area			- 1.2
South Area		Insufficient data to compute change	
Semitropic Water Storage District	5-22.43		
Shallow Zone			+ 0.3
Deep Zone			- 9.8
Avenal-McKittrick Area	5-22.44	Insufficient data to compute change	
Tulare Lake-Lost Hills Area	5-22.45	Insufficient data to compute change.	
Corcoran Irrigation District	5-22.46		
Shallow Zone			+ 2.7
Deep Zone			+ 2.7
Mendota-Huron Area	5-22.47		
Deep Zone			+34.5[b]
Poso Soil Conservation District	5-22.48		+ 0.1
San Luis Canal Company	5-22.49		- 2.1

TABLE C-1 (Cont.)

CHANGE IN AVERAGE GROUND WATER LEVEL
IN DISTRICTS OR AREAS IN THE SAN JOAQUIN VALLEY
Spring 1972-- Spring 1973

Ground Water Districts or Areas		Number of Wells Considered in Analysis[a]	Change in Feet
Name	Number		
San Joaquin Valley (Continued)			
Terra Bella Irrigation District	5-22.50	3	- 8.6
Merced Bottoms	5-22.54		+ 2.1
Centerville Bottoms Area	5-22.64		+ 4.2
Garfield Water District	5-22.65	11	- 2.4
Kings County Water District	5-22.66		
Shallow Zone			- 3.9
Deep Zone			- 8.1
Pleasant Valley Area	5-22.69	23	- 5.3

a/ Average changes were determined by planimetering ground water contour maps. Where numbers appear changes were computed by numerical averages.
b/ Average change determined from water level measurements made during January 1972 and February 1973.

TABLE C-2

CHANGE IN AVERAGE GROUND WATER LEVEL FROM
1921 TO 1951 AND 1951 TO 1973
IN 18 GROUND WATER AREAS IN THE SAN JOAQUIN VALLEY

Name of Ground Water Area*	Area in square miles	Irrigation and Other Water Districts Included in the Ground Water Area	Net change in water level 1921-51 a/ in feet	Net change in water level 1951-73 b/ in feet
Madera	342.6	Madera Irrigation District and Chowchilla Water District	- 24.1 c/	- 26.0
Fresno	404.0	Fresno Irrigation District and City of Fresno	- 22.4	- 20.2
Consolidated	243.0	Consolidated Irrigation District	- 19.0	- 1.7
Centerville Bottoms	18.1	-----	+ 1.0	- 1.2
Alta	190.9	Alta Irrigation District	- 17.2 c/	+ 1.7
Ivanhoe	17.4	Ivanhoe Irrigation District	- 55.9	+ 8.5
Outside Ivanhoe	76.6	Stone Corral Irrigation District and a portion of Alta Irrigation District	- 28.5	+ 1.4
Mill Creek	128.2	Portions of Kings County Water District and Kaweah Delta Water Conservation District	- 31.1	- 21.0
Tulare	121.1	Tulare Irrigation District	- 59.1	- 3.1
Elk Bayou	67.6	Portion of Kaweah Delta Water Conservation District	- 47.8	- 4.8
Lindsay-Exeter	136.4	Exeter Irrigation District, Lindsay-Strathmore Irrigation District, and Lindmore Irrigation District	- 77.7	+ 72.9
Tule River	156.6	Porterville Irrigation District, portions of Lower Tule River Irrigation District, and Saucelito Irrigation District	- 62.5	+ 33.8
Lower Deer Creek	162.2	Portions of Lower Tule River Irrigation District, Saucelito Irrigation District, and Delano-Earlimart Irrigation District	-106.7	- 32.1 e/ - 10.2 f/
Middle Deer Creek	54.6	Terra Bella Irrigation District	- 61.8	- 11.2 e/ - 40.6 f/
Delano-Earlimart	140.0	Portions of Delano-Earlimart Irrigation District and Southern San Joaquin Municipal Utility District	-133.8	+ 11.7 e/ + 11.5 g/
McFarland-Shafter	306.0	North Kern Water Storage District, Shafter-Wasco Irrigation District, and a portion of Southern San Joaquin Municipal Utility District	- 99.0	- 37.0 e/ - 48.3 g/
Rosedale	78.9	-----	- 36.3	- 78.6 - 32.8 g/
Arvin-Edison	205.2	Arvin-Edison Water Storage District	- 69.9 d/	- 37.0 g/

a/ 1951 was the first year of substantial deliveries from the Friant-Kern Canal.
b/ Fall 1951 to spring 1973.
c/ Fall 1929 to fall 1951.
d/ Fall 1941 to fall 1951.
e/ Unconfined aquifer, spring 1961 to spring 1973; only one aquifer reported prior to 1961.
f/ Change shown for 1951 to 1971; insufficient data in pressure aquifer to compute changes for 1971-73
g/ Pressure surface, spring 1961 to spring 1973; only one aquifer reported prior to 1961.

* These areas are shown on Plate 2.

TABLE C-3

GROUND WATER LEVELS AT WELLS

An explanation of the column headings and the code symbols follows:

State Well Number--refer to the explanation under Introduction, page 119.

Aquifer--Qualifications are based on the latest geologic knowledge of the aquifer system and construction of individual wells. The code symbols are as follows:

0	Unqualified due to lack of well construction and/or geology information.	4	Unconfined, outside Corcoran Clay area.
1	Unconfined, perforated above the Corcoran Clay.	5	Confined, aquitard other than Corcoran Clay.
2	Confined, perforated below the Corcoran Clay.	6	Composite, perforated above and below aquitard outside Corcoran Clay area.
3	Composite, perforated above and below the Corcoran Clay.		

Ground surface elevation represents the elevation in feet above mean sea level (U.S.G.S. and U.S.C. & G.S. datum) of the ground surface at the well. Elevations are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date is the date the depth measurement was made. Where 00 appears in the date, day of measurement is unknown.

Ground surface to water surface in feet is the measured depth in feet from the ground surface to the water surface in the well.

Other code symbols used in this column are as follows:

NO MEASUREMENT (NM)

0	Measurement discontinued	5	Unable to locate well
1	Pumping	6	Well has been destroyed
2	Pump house locked	7	Special
3	Tape hung up	8	Casing leaking or wet
4	Can't get tape in casing	9	Temporarily inaccessible

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

Water surface elevation is the elevation in feet above mean sea level (U.S.G.S. and U.S.C. & G.S. datum) of the water surface in the well. It was derived by machine computation by subtraction of the depth measurement from the reference point elevation.

Agency supplying data represents the code numbers for the agencies supplying water level data.

In this list of water levels, the agency furnishing the measurement is noted. The agencies and code numbers assigned to them are as follows:

Agency Code	Agency	Agency Code	Agency
5000	U. S. Geological Survey	5603	Kaweah Delta Water Conservation District
5001	U. S. Bureau of Reclamation	5604	Tulare Irrigation District
5050	Department of Water Resources	5607	Lindmore Irrigation District
5121	Kern County Water Agency	5608	Porterville Irrigation District
5129	Kings County Water District	5609	Lower Tule Irrigation District
5200	City of Fresno	5620	James Irrigation District
5520	Oakdale Irrigation District	5631	Fresno Irrigation District
5521	Modesto Irrigation District	5636	Consolidated Irrigation District
5524	Turlock Irrigation District	5637	Alta Irrigation District
5525	Merced Irrigation District	5640	Buena Vista Water Storage District
5527	El Nido Irrigation District	5644	Arvin-Edison Water Storage District
5528	Chowchilla Water District		
5529	Poso Soil Conservation District		

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
OAKDALE I D				52206		
015/09E-16J01 M		119.0	03-00-73	65.8	53.2	5520
015/09E-36A01 M		145.0	03-00-73	57.2	87.8	5520
015/10E-19L01 M		146.5	03-00-73	59.4	87.1	5520
015/10E-28J01 M		193.0	03-00-73	86.6	106.4	5520
025/09E-26F01 M		132.0	03-00-73	53.6	78.4	5520
025/10E-04H01 M		185.5	03-00-73	78.8	106.7	5520
025/10E-33J01 M		165.0	03-00-73	60.1	104.9	5520
025/11E-29B01 M		218.0	03-00-73	90.1	127.9	5520
025/11E-31N01 M		192.0	03-00-73	74.7	117.3	5520
025/12E-31K01 M		190.0	03-00-73	42.8	147.2	5520
035/10E-15A01 M		152.0	03-00-73	46.5	105.5	5520
035/11E-18D01 M		162.0	04-19-73	54.0	108.0	5520
MODESTO I D				52207		
025/08E-25P01 M		94.0	03-00-73	38.6	55.4	5521
025/09E-30F01 M		93.0	10-19-72	30.5	62.5	5050
			04-16-73	29.1	63.9	
025/09E-31G01 M		100.3	03-00-73	36.0	61.0	5521
035/07E-12C01 M		47.0	10-19-72	9.0	38.0	5050
			04-16-73	7.2	39.8	
035/07E-35A02 M		40.0	10-19-72	4.5	35.5	5050
			04-16-73	6.0	34.0	
035/08E-03A02 M		73.0	10-19-72	NM-5		5050
			04-16-73	NM-6		
035/08E-24C02 M		74.0	03-00-73	21.9	51.1	5521
035/09E-08D01 M		92.5	03-00-73	29.2	62.8	5521
035/09E-11M01 M		99.0	03-00-73	23.9	75.1	5521
035/09E-26F01 M		100.0	04-16-73	35.2	64.8	5050
035/10E-06G01 M		133.1	03-00-73	38.2	94.9	5521
035/10E-29K01 M		119.2	03-00-73	49.9	68.1	5521
035/10E-32G01 M		123.0	03-00-73	61.0	59.0	5521
035/10E-33E01 M		120.0	10-19-72	NM-5		5050
			04-17-73	NM-6		
045/08E-03F01 M		63.0	03-00-73	19.0	41.0	5521
TURLOCK I D				52208		
045/08E-22R01 M	1	55.0	10-19-72	11.0	44.0	5050
			04-17-73	9.0	46.0	
045/08E-27D01 M		55.0	03-05-73	10.1	44.9	5524
045/09E-21N01 M		75.0	03-05-73	10.4	64.6	5524
045/10E-21R01 M	1	109.0	03-05-73	DRY		5524
045/11E-29N01 M	1	131.0	03-05-73	DRY		5524
045/11E-31R01 M		128.6	03-05-73	11.0	117.0	5524
055/08E-01N01 M		53.0	03-05-73	3.1	49.9	5524
055/08E-10A01 M		49.7	03-05-73	5.5	38.5	5524
055/09E-04A01 M		70.0	10-19-72	9.5	61.5	5050
			04-17-73	12.2	57.8	
055/09E-14R01 M		75.0	03-05-73	7.4	67.6	5524
055/09E-24N01 M		75.0	03-05-73	7.3	67.7	5524
055/09E-28A01 M		63.4	03-05-73	2.7	60.3	5524
055/09E-34J01 M		64.0	10-19-72	6.0	58.0	5050
			04-17-73	12.0	52.0	
055/10E-19R01 M		82.9	03-05-73	3.2	78.8	5524
055/10E-21R01 M		92.0	03-05-73	4.0	88.0	5524
055/11E-06J02 M	1	124.0	10-19-72	10.0	114.0	5050
			04-17-73	9.5	114.5	
055/11E-21N01 M		125.0	03-05-73	6.5	118.5	5524
055/11E-30A01 M		117.0	03-05-73	12.0	105.0	5524
055/11E-33N01 M		115.5	03-05-73	4.5	111.0	5524
065/09E-15R01 M		60.0	03-05-73	.6	59.4	5524
TURLOCK I D				52208		
065/10E-21A01 M		85.6	03-05-73	1.3	84.3	5524
065/10E-28D01 M		83.6	03-05-73	7.9	75.7	5524
065/11E-06N01 M		106.2	03-05-73	10.5	95.7	5524
065/11E-08R01 M		115.0	03-05-73	11.6	104.6	5524
MERCED I D				52209		
065/12E-22N01 M	1	150.0	10-16-72	19.0	131.0	5050
			03-02-73	16.0	134.8	
065/14E-32N01 M	1	178.1	03-07-73	6.3	171.8	5525
075/10E-01N01 M	1	90.7	03-05-73	7.0	83.7	5525
			03-20-73	7.0	83.7	
075/11E-01M01 M		118.0	10-16-72	17.0	101.0	5050
			04-19-73	14.9	103.1	
075/11E-13N01 M	1	106.6	03-05-73	2.6	104.0	5525
			03-20-73	2.1	104.5	
075/12E-12D01 M	1	144.0	10-16-72	NM-5		5050
			03-01-73	17.3	126.2	
075/12E-12R01 M	1	147.3	03-01-73	DRY		5525
075/13E-26Q01 M	1	155.8	10-16-72	12.0	143.8	5050
			03-05-73	11.3	144.2	
075/14E-11N01 M	1	192.0	10-16-72	17.0	175.0	5050
			03-07-73	15.4	176.4	
075/14E-16R01 M	1	187.5	03-07-73	15.7	171.8	5525
085/12E-01D01 M	1	120.2	03-05-73	4.9	115.2	5525
085/13E-09R01 M	1	135.0	03-05-73	3.0	132.0	5525
085/14E-01A01 M	1	196.8	03-05-73	11.5	186.0	5525
085/14E-10N01 M	1	172.6	10-16-72	75.0	165.1	5050
			03-05-73	5.0	168.6	
EL NIDO I D				52210		
095/13E-14M01 M		133.0	10-30-72	93.0	40.0	5527
			02-10-73	84.0	49.0	
095/14E-20B01 M		152.0	10-30-72	73.0	79.0	5527
			02-10-73	NM-1		
DELTA-MENDOTA AREA				52211		
045/06E-04N01 M	2	193.0	10-12-72	113.5	82.5	5050
045/08E-09R01 M	1	166.3	10-05-72	140.9	25.4	5001
			04-26-73	NM-7		
045/07E-27M01 M	1	68.0	10-06-72	25.2	42.8	5001
			04-26-73	NM-1		
055/07E-14D01 M	1	130.4	10-12-72	77.8	52.6	5001
			04-27-73	65.3	65.1	
055/07E-23L01 M		138.0	10-12-72	88.0	50.0	5050
055/08E-32K01 M	1	90.9	10-12-72	7.0	83.9	5001
			04-27-73	5.5	85.4	
065/07E-12P01 M		248.3	10-13-72	16.2	232.1	5050
			04-18-73	14.0	234.3	
065/08E-21R02 M	2	133.0	10-13-72	41.8	91.7	5050
			04-18-73	72.0	61.5	
065/08E-27J01 M	1	114.5	10-13-72	51.0	63.5	5050
			04-18-73	52.0	62.5	
065/08E-29J01 M	2	190.0	10-13-72	86.0	104.0	5050
			04-18-73	NM-5		
075/08E-22L01 M	1	127.9	10-13-72	NM-3		5050
			04-17-73	NM-3		
075/09E-04R01 M	1	65.6	10-18-72	16.0	49.5	5050
			04-18-73	13.0	52.5	
075/09E-26N01 M	1	68.4	10-12-72	9.1	59.3	5050
			04-18-73	3.5	64.9	
085/08E-01N01 M	1	123.2	10-18-72	16.0	107.2	5050
			04-18-73	22.5	100.7	
085/08E-15J01 M	2	172.8	10-18-72	28.5	144.3	5050
			04-17-73	29.0	143.8	
085/09E-26H01 M	2	75.0	10-12-72	44.4	30.6	5050
			04-16-73	16.5	58.5	
085/09E-26H03 M	1	75.0	10-12-72	7.0	68.0	5050
			04-16-73	2.0	73.0	
085/10E-21L04 M		75.0	04-19-73	NM-7		5050
095/08E-24A01 M	1	157.0	10-18-72	9.0	148.0	5050
			04-12-73	6.0	151.0	

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
FRESNO I D				52215		
15S/20E-13E02 M	4	282.5	10-12-72	NM-1		5631
			03-01-73	37.0	245.5	
CITY OF FRESNO				52216		
13S/20E-21J01 M		310.0	04-01-73	96.6	213.4	5200
13S/20E-23B01 M		325.0	04-01-73	92.1	232.9	5200
13S/20E-28E01 M		299.3	01-02-72	86.3	200.0	5200
			04-01-73	87.8	211.5	
13S/20E-35M02 M		305.3	04-01-73	82.4	222.9	5200
14S/20E-10M01 M		291.4	01-02-72	74.1	201.5	5200
			04-01-73	74.7	216.7	
FRESNO SLOUGH AREA				52217		
14S/15E-25M02 M		160.0	10-11-72	33.1	126.9	5001
			02-21-73	NM-9		
14S/16E-03C01 M		177.0	10-11-72	NM-7		5001
			02-22-73	61.7	115.3	
14S/16E-08D01 M		165.0	10-11-72	89.1	75.9	5001
			02-21-73	40.0	125.0	
14S/16E-22N01 M	1	163.0	10-11-72	32.0	132.0	5001
			02-21-73	22.1	141.9	
14S/17E-25A01 M	1	211.0	10-10-72	121.3	88.7	5001
			02-09-73	104.7	105.3	
15S/16E-12C03 M		169.5	10-12-72	44.5	125.0	5620
			10-13-72	45.0	126.0	5050
			02-20-73	41.5	129.5	5050
			02-22-73	43.3	126.2	5620
15S/17E-22R01 M	1	187.0	10-06-72	112.2	72.8	5001
			02-08-73	108.0	77.0	
16S/18E-07A02 M		204.0	10-04-72	NM-1		5001
			02-08-73	126.5	77.5	
16S/18E-03J01 M		206.0	10-13-72	141.0	65.0	5050
			03-13-73	131.5	74.5	
16S/18E-27C01 M	1	198.0	10-13-72	140.0	58.0	5050
			03-12-73	NM-6		
16S/19E-34P01 M		220.0	10-13-72	119.0	101.0	5050
			03-12-73	107.0	113.0	
17S/17E-12M01 M	1	199.0	10-12-72	177.0	22.0	5050
17S/18E-23A02 M	1	200.0	10-12-72	79.0	121.0	5050
			03-13-73	87.5	112.0	
CONSOLIDATED I D				52218		
14S/22E-22N01 M	4	355.7	10-06-72	31.5	324.2	5636
			03-00-73	32.5	323.2	
15S/19E-24N01 M	4	246.6	10-06-72	46.3	199.4	5636
15S/20E-28A01 M		264.8	03-00-73	51.1	212.9	5636
15S/21E-15D01 M	4	301.2	10-06-72	30.9	270.3	5636
			03-00-73	29.5	271.5	
15S/22E-16A01 M	4	337.0	10-06-72	30.0	307.0	5636
			03-00-73	30.9	306.1	
15S/22E-29D01 M	4	321.9	10-06-72	34.5	287.4	5636
			03-00-73	33.8	287.2	
16S/19E-14A01 M	4	235.5	10-06-72	107.1	128.4	5636
			03-00-73	97.9	137.1	
16S/20E-22N01 M	4	247.7	10-05-72	73.5	174.8	5636
			03-00-73	68.2	179.8	
16S/21E-22N01 M	4	271.0	10-05-72	51.8	219.2	5636
			03-00-73	47.2	223.8	
16S/22E-23R01 M	4	297.5	10-05-72	31.6	265.9	5636
			03-00-73	25.8	271.2	
17S/22E-03C01 M	4	286.0	10-05-72	27.9	258.1	5636
			03-00-73	28.0	258.0	
ALTA I D				52219		
14S/23E-36R01 M	4	391.0	10-04-72	69.0	322.0	5637
			03-02-73	59.9	331.1	
14S/24E-31P01 M	4	395.0	10-04-72	62.5	332.5	5001
			03-02-73	57.3	337.7	
15S/23E-23A02 M	4	358.0	10-04-72	58.9	299.1	5637
			03-02-73	53.5	304.5	
15S/24E-22D01 M	4	388.0	10-04-72	45.7	342.3	5637
			02-28-73	42.6	345.4	
16S/23E-23E01 M	4	314.0	10-04-72	29.0	285.0	5637
			03-01-73	28.9	285.1	
16S/24E-21J01 M	4	336.0	10-04-72	NM-7		5637
ALTA I D				52219		
16S/24E-21J01 M	1	336.0	03-05-73	38.0	298.0	5637
16S/25E-29A01 M	4	364.0	10-04-72	NM-7		5637
			02-28-73	39.8	324.2	
17S/22E-25A01 M	4	276.0	10-04-72	NM-7		5637
			03-03-73	42.3	232.7	
17S/22E-26J01 M	4	275.0	10-04-72	47.7	227.3	5637
			03-03-73	43.0	232.0	
17S/24E-15A03 M		302.0	10-02-72	41.8	260.2	5001
			02-06-73	31.4	270.6	
17S/25E-10C01 M	4	335.0	10-04-72	37.8	297.2	5637
			03-05-73	34.1	300.9	
17S/25E-18R01 M	4	321.0	10-04-72	63.1	257.9	5637
			03-05-73	58.8	262.2	
LOWER KINGS RIVER AREA				52220		
17S/19E-14J01 M		217.0	10-12-72	90.0	127.0	5050
			03-13-73	NM-9		
17S/20E-20D01 M	1	223.0	10-12-72	87.0	136.0	5050
			03-13-73	70.0	153.0	
17S/21E-11K01 M		257.0	10-12-72	NM-1		5050
			04-13-73	NM-1		
18S/19E-35J02 M	3	211.0	10-12-72	167.0	44.0	5050
			03-19-73	114.0	97.0	
18S/20E-16A01 M	1	230.0	10-12-72	NM-4		5050
			04-10-73	8.0	222.0	
18S/21E-10R01 M		254.0	10-02-72	83.2	170.8	5129
			10-12-72	80.0	174.0	5050
			02-27-73	67.0	187.0	5129
19S/19E-25A01 M	1	208.0	10-12-72	4.3	203.7	5050
			04-11-73	NM-5		
20S/22E-19M02 M		211.0	10-11-72	NM-5		5050
			04-12-73	NM-6		
ORANGE COVE I D				52221		
14S/24E-29C02 M	4	430.5	10-03-72	52.8	377.7	5001
			02-01-73	42.5	388.0	
14S/25E-30D01 M	1	510.0	10-03-72	29.0	481.0	5001
15S/24E-14D01 M	4	405.0	10-02-72	NM-6		5001
16S/25E-04C02 M	4	415.0	10-03-72	18.3	396.7	5001
			02-01-73	17.1	397.9	
STONE CORRAL I D				52222		
17S/25E-01D01 M	1	355.0	10-02-72	28.9	326.1	5001
			10-04-72	26.3	328.7	5637
			03-05-73	21.8	333.2	
17S/26E-07R01 M		364.0	10-02-72	19.6	344.4	5001
			02-06-73	16.3	347.7	
IVANHOE I D				52223		
17S/25E-27R01 M	4	350.0	10-03-72	82.8	267.2	5001
			02-01-73	78.1	271.9	
17S/25E-35M01 M	4	349.0	10-03-72	76.0	273.0	5001
			02-01-73	69.8	279.2	
17S/25E-36G01 M	4	365.0	10-03-72	72.1	292.9	5001
			02-01-73	68.8	296.2	
17S/26E-32N01 M	4	385.0	10-03-72	66.1	318.9	5001
			02-01-73	63.2	321.8	
17S/26E-34D01 M	4	416.0	10-03-72	71.8	344.2	5001
			02-01-73	65.2	350.8	
KAWEAH DELTA W C D				52224		
17S/25E-15P01 M	1	340.0	10-02-72	NM-1		5001
			02-06-73	78.0	262.0	
17S/26E-17P02 M	1	385.0	10-02-72	28.3	356.7	5001
			02-07-73	26.7	358.3	
17S/27E-34P01 M	1	473.0	10-03-72	17.4	452.6	5001
			02-07-73	9.9	460.1	
18S/22E-29A01 M		251.0	09-29-72	93.4	157.6	5001
			02-02-73	86.8	164.2	
18S/23E-12H01 M		282.5	09-27-72	71.0	211.5	5001
			02-05-73	55.5	227.0	
18S/23E-34A01 M		271.0	10-05-72	126.4	144.6	5001
			02-20-73	100.6	170.4	
18S/24E-26A01 M	4	312.5	09-27-72	58.0	254.0	5001
			02-12-73	62.0	250.0	
18S/25E-12Q01 M	4	363.0	09-25-72	70.7	292.3	5001
			02-12-73	65.5	297.5	

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
KAWEAH DELTA W C D				52224		
18S/25E-33F01 M	4	338.0	10-06-72	43.0	295.0	5001
			02-09-73	41.0	297.0	
18S/26E-27E01 M	4	390.0	09-27-72	15.5	374.5	5001
			02-09-73	NM-1		
18S/24E-30N01 M		367.0	09-27-72	29.5	337.5	5001
			02-15-73	30.5	336.5	
19S/22E-01N02 M	1	245.0	09-28-72	90.5	154.5	5001
			02-07-73	82.5	162.5	
19S/22E-36E01 M	1	234.0	10-02-72	79.2	155.1	5001
			02-16-73	71.9	162.4	
19S/25E-07K01 M		320.0	09-26-72	38.5	279.5	5001
			02-05-73	49.0	269.0	
19S/26E-34R02 M	1	341.0	10-02-72	90.8	250.2	5001
			02-06-73	66.0	275.0	
20S/22E-10C01 M	1	226.0	09-29-72	123.0	104.0	5001
			02-14-73	109.0	118.0	
TULARE I D				52225		
19S/23E-14R01 M	1	270.0	10-13-72	88.4	181.6	5001
			02-12-73	82.7	187.3	
19S/23E-32H01 M	1	250.5	10-11-72	97.9	152.6	5001
			02-12-73	94.0	156.5	
19S/24E-16P01 M		290.0	10-11-72	93.5	196.5	5001
			02-12-73	85.2	204.8	
19S/24E-27D01 M	1	290.0	10-10-72	98.5	191.5	5001
			02-12-73	76.5	213.5	
19S/25E-17A02 M	4	328.0	10-10-72	59.0	269.0	5001
			02-07-73	61.5	266.5	
20S/23E-08B02 M	1	241.0	10-10-72	103.8	137.2	5129
			10-11-72	126.5	114.5	5604
			02-14-73	NM-9		
20S/24E-16M01 M		273.0	10-09-72	103.8	169.2	5001
			02-05-73	82.7	190.3	
20S/24E-30J02 M	1	250.0	10-09-72	98.5	151.5	5001
			02-13-73	89.2	160.8	
21S/23E-05R01 M	1	222.0	10-13-72	83.5	138.5	5001
			02-13-73	78.5	143.5	
EXETER I D				52226		
18S/26E-25K01 M	4	436.0	10-02-72	67.2	368.8	5001
			02-02-73	57.0	379.0	
18S/26E-34P02 M	4	391.0	10-02-72	NM-4		5001
			02-02-73	52.1	338.9	
18S/27E-29D01 M	4	447.0	10-02-72	43.7	403.3	5001
			02-02-73	30.0	417.0	
19S/26E-14E01 M	4	375.0	10-02-72	76.4	298.6	5001
			02-05-73	66.4	308.6	
19S/24E-23E01 M	4	359.0	10-02-72	76.6	282.9	5001
			02-05-73	69.8	289.7	
LINDSAY-STRATHMORE I D				52227		
19S/27E-29D01 M	4	385.0	10-03-72	53.2	331.8	5001
			02-05-73	49.1	335.9	
20S/27E-06B01 M	4	372.0	10-03-72	45.3	326.7	5001
			02-05-73	45.9	326.1	
20S/27E-16A01 M	4	426.0	10-03-72	27.2	398.8	5001
			02-05-73	25.5	400.5	
20S/27E-21F01 M	4	414.0	10-03-72	31.1	382.9	5001
			02-05-73	28.8	385.2	
20S/27E-29J01 M	4	406.0	10-03-72	NM-1		5001
			02-05-73	24.7	381.3	
LINDMORE I D				52228		
20S/26E-01P01 M	4	360.0	10-02-72	76.1	283.9	5001
			02-05-73	63.5	296.5	
20S/26E-22C02 M	4	341.0	10-02-72	97.0	244.0	5001
			02-05-73	88.8	252.2	
20S/24E-24K01 M		362.5	10-03-72	50.2	312.3	5001
			02-05-73	42.5	320.0	
20S/26E-32A01 M	4	331.5	10-03-72	94.4	237.1	5607
			10-03-72	94.6	236.9	5609
			02-06-73	83.2	248.3	5607
			02-09-73	81.7	249.8	5609
20S/27E-29E01 M	4	392.0	10-03-72	32.5	359.5	5001
			02-07-73	26.5	365.5	
PORTERVILLE I D				52229		
21S/26E-12A01 M	4	372.0	10-02-72	38.3	333.7	5608
PORTERVILLE I D				52229		
21S/26E-12A01 M	4	372.0	02-05-73	31.8	340.2	5608
21S/27E-21C01 M		409.0	10-02-72	24.6	384.4	5001
			02-05-73	23.6	385.4	
21S/27E-28E01 M	4	420.0	10-02-72	33.4	386.6	5001
			02-05-73	23.8	396.2	
22S/24E-01J01 M	4	395.0	10-02-72	79.9	315.1	5608
			02-05-73	NM-3		
22S/27E-06Q01 M	4	397.0	10-02-72	58.9	338.1	5608
			02-05-73	55.1	341.9	
22S/27E-10A01 M	4	455.0	10-02-72	74.3	380.7	5608
			02-05-73	NM-3		
22S/27E-10R01 M	4	467.0	10-02-72	NM-3		5001
			02-05-73	NM-3		
LOWER TULE RIVER I D				52230		
21S/23E-22J01 M	1	221.5	10-02-72	91.0	131.5	5001
			02-14-73	71.0	151.5	
21S/24E-15M01 M	1	253.0	10-06-72	54.7	198.3	5001
			02-13-73	51.0	202.0	
21S/24E-31D01 M		230.0	10-06-72	79.5	150.5	5001
			02-13-73	75.2	154.8	
21S/24E-35M01 M		251.0	10-06-72	86.0	165.0	5001
			02-13-73	81.0	170.0	
21S/25E-08M01 M		285.0	10-03-72	123.5	162.5	5001
			02-09-73	69.1	216.9	
21S/26E-06G02 M		322.0	10-03-72	91.4	230.6	5001
			02-08-73	66.6	255.4	
21S/24E-10E01 M		350.0	10-03-72	56.5	293.5	5001
			02-08-73	52.0	298.0	
22S/24E-09A01 M		245.0	10-06-72	NM-1		5001
			02-15-73	116.6	128.4	
22S/24E-15A01 M	1	251.5	10-06-72	143.3	109.7	5001
			02-15-73	138.2	114.8	
22S/25E-10E01 M		296.0	10-05-72	108.5	187.5	5001
			02-14-73	105.3	190.7	
22S/25E-15A01 M	1	300.5	10-05-72	NM-1		5001
			02-14-73	130.7	172.3	
22S/26E-06A01 M	4	337.0	09-25-72	128.0	209.0	5001
			01-29-73	111.0	226.0	
VANDALIA I D				52231		
22S/28E-07Q01 M		524.0	09-28-72	134.4	389.6	5001
			01-31-73	122.8	401.2	
22S/28E-17N01 M		577.0	09-28-72	186.2	390.8	5001
			01-31-73	138.0	439.0	
22S/28E-18A01 M		535.0	09-28-72	147.2	387.8	5001
			01-31-73	108.1	426.9	
SAUCELITO I D				52232		
22S/26E-15J01 M	4	371.0	09-25-72	132.5	238.5	5001
			01-29-73	120.5	250.5	
23S/24E-02R01 M	4	397.0	09-26-72	171.5	224.5	5001
			01-29-73	156.0	240.0	
23S/24E-03P01 M		381.0	09-26-72	180.5	200.5	5001
			01-29-73	NM-4		
PIXLEY I D				52233		
22S/25E-25N01 M		310.0	09-26-72	NM-7		5001
			01-29-73	179.9	130.1	
23S/24E-16R01 M		222.0	09-26-72	136.1	85.9	5001
			02-01-73	124.8	97.2	
23S/25E-14C01 M	4	300.0	09-27-72	NM-9		5001
			02-01-73	62.9	237.1	
23S/24E-08R01 M		345.0	09-26-72	193.5	151.5	5001
			01-29-73	178.3	166.7	
ALPAUGH-ALLENSWORTH AREA				52234		
23S/24E-35A02 M		235.0	09-25-72	213.6	21.4	5001
			02-01-73	145.2	89.8	
24S/23E-05R02 M		210.0	09-27-72	NM-1		5001
			01-31-73	211.2	- 1.2	
24S/23E-21B02 M		205.0	09-27-72	69.3	135.7	5001
			01-31-73	69.3	135.7	
24S/23E-34R01 M	3	206.0	09-27-72	234.7	- 29.7	5001
			01-31-73	NM-9		
24S/24E-20R01 M		218.0	09-27-72	NM-1		5001
			01-31-73	179.5	38.5	

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
ALPAUGH-ALLENSWORTH AREA				52234		
24S/24E-22R01 M		233.0	09-27-72	257.3	24.3	5001
			01-31-73	170.2	62.8	
24S/24E-34F01 M		232.0	09-27-72	102.1	129.9	5001
			01-31-73	92.3	139.7	
24S/25E-17R01 M	3	268.0	09-27-72	131.6	136.4	5001
			01-31-73	94.9	173.1	
DELANO-EARLIMART I D				52235		
23S/24E-27J02 M	1	296.0	09-28-72	NM-6		5001
23S/26E-29R01 M		356.5	09-29-72	177.5	179.5	5001
			02-02-73	166.5	190.5	
23S/27E-27G01 M	4	552.0	09-29-72	NM-1		5001
			02-02-73	301.5	250.5	
24S/25E-10A01 M	3	304.0	09-28-72	158.5	145.5	5001
			02-01-73	110.5	193.5	
24S/25E-33J01 M		291.5	09-25-72	187.5	104.5	5001
			01-31-73	52.5	239.5	
24S/26E-05R01 M	4	376.0	09-27-72	171.0	205.0	5001
			01-31-73	165.0	211.0	
24S/26E-20M01 M	4	378.0	09-27-72	156.0	222.0	5001
			01-31-73	132.0	246.0	
24S/26E-29R02 M	1	400.0	09-27-72	142.0	259.0	5000
			01-31-73	126.0	275.0	
24S/26E-32G01 M	1	396.0	09-27-72	121.0	276.0	5001
			01-31-73	108.0	289.0	
25S/26E-10R03 M	4	430.0	09-26-72	194.5	235.5	5001
			01-29-73	175.5	254.5	
25S/26E-16R01 M		388.0	09-25-72	90.3	297.7	5000
			01-29-73	95.3	292.7	
25S/27E-22H01 M	4	750.0	09-25-72	NM-1		5001
			01-29-73	448.7	301.3	
SOUTHERN SAN JOAQUIN MUD				52236		
25S/25E-36R02 M		335.0	09-27-72	220.0	115.0	5001
			02-01-73	173.0	162.0	
25S/26E-28H02 M		414.0	09-29-72	190.0	225.0	5001
			02-02-73	182.0	233.0	
26S/26E-16R01 M		443.0	09-29-72	313.0	130.0	5001
			01-31-73	294.0	149.0	
NORTH KERN W S D				52237		
26S/25E-15R01 M	3	346.7	09-27-72	275.0	73.0	5000
			01-29-73	NM-2		
26S/25E-15R01 M	3	352.3	09-27-72	274.0	78.3	5050
			01-29-73	196.6	155.7	
26S/26E-30R01 M	2	392.0	09-27-72	307.0	85.0	5050
			01-31-73	252.0	140.0	
27S/25E-01N01 M	3	394.0	09-27-72	126.0	268.0	5000
			01-31-73	136.0	258.0	
27S/25E-01N03 M	2	394.0	09-27-72	327.0	67.0	5000
			01-31-73	270.0	124.0	
27S/26E-20E01 M	1	435.7	09-29-72	NM-4		5050
			01-31-73	NM-4		
27S/27E-30M02 M	4	527.0	09-28-72	NM-9		5001
			02-02-73	NM-3		
28S/25E-13L01 M	3	361.1	09-28-72	NM-1		5050
			02-06-73	NM-4		
28S/26E-21M01 M	3	388.0	09-28-72	189.0	199.0	5000
			02-06-73	197.0	191.0	
28S/26E-21M03 M	2	388.0	09-28-72	295.0	93.0	5000
			02-06-73	247.0	141.0	
SHAFTER-WASCO I D				52238		
27S/24E-01L02 M		322.0	09-25-72	290.5	31.5	5000
			01-29-73	221.5	100.5	
27S/24E-35C01 M	3	316.0	09-26-72	268.0	53.8	5050
			02-05-73	239.0	82.8	
27S/25E-28A01 M	3	375.0	09-28-72	290.0	85.0	5000
			02-06-73	250.0	125.0	
28S/26E-16R01 M		329.0	10-02-72	221.0	108.0	5000
			02-01-73	212.4	116.6	
KERN RIVER DELTA AREA				52240		
28S/26E-29L01 M	3	349.0	10-03-72	198.5	151.5	5050
			01-30-73	176.6	173.4	
KERN RIVER DELTA AREA				52240		
28S/26E-29L01 M	3	349.0	02-06-73	NM-1		5050
29S/25E-12M03 M	2	330.0	10-05-72	180.5	149.5	5000
			02-01-73	170.5	159.5	
30S/25E-17E01 M		300.6	10-04-72	NM-2		5640
			03-00-73	NM-2		
30S/26E-22D01 M		308.5	10-04-72	77.8	230.7	5640
			03-00-73	81.4	227.1	
30S/26E-22R02 M	2	338.0	10-04-72	106.5	231.5	5000
			01-31-73	95.5	242.5	
30S/28E-32R01 M	1	354.4	09-27-72	116.6	236.4	5001
			02-01-73	128.0	225.0	
31S/27E-04L01 M	3	341.1	09-28-72	NM-4		5050
			02-01-73	NM-4		
31S/27E-28J01 M	1	312.1	10-03-72	82.5	229.6	5121
			01-29-73	83.5	228.6	
31S/28E-30M01 M	3	314.7	09-28-72	NM-1		5050
			01-31-73	70.0	244.7	
32S/27E-18E01 M	3	292.6	09-26-72	NM-1		5050
			02-01-73	120.0	172.6	
32S/28E-04R01 M		301.0	09-25-72	59.5	241.5	5001
			01-30-73	NM-3		
EDISON-MARICOPA AREA				52241		
11N/18W-18M01 S	1	726.0	10-04-72	NM-7		5644
11N/19W-04M01 S	4	575.9	10-04-72	456.8	119.2	5644
11N/20W-07Q01 S	3	452.3	09-26-72	305.0	147.3	5050
			01-31-73	299.0	153.3	
11N/20W-24A01 S		730.2	09-26-72	NM-4		5050
			01-31-73	NM-1		
11N/21W-05M01 S	3	515.9	09-26-72	442.0	73.9	5050
			01-31-73	436.0	79.9	
11N/22W-04M01 S	3	529.0	09-26-72	412.0	117.0	5050
			01-31-73	410.0	119.0	
29S/29E-33N01 M	4	578.0	09-19-72	444.5	135.5	5644
			01-16-73	428.4	151.6	
30S/28E-02R01 M	4	410.0	09-27-72	230.9	180.1	5001
			02-01-73	NM-3		
30S/28E-10N01 M		372.0	09-27-72	9.9	363.1	5001
			02-01-73	56.9	316.1	
30S/28E-10N04 M		372.0	09-27-72	199.6	173.4	5000
30S/29E-09F01 M		515.0	09-20-72	373.0	142.0	5644
			01-17-73	364.2	150.8	
30S/29E-26A01 M	4	628.0	09-21-72	NM-4		5644
			01-23-73	NM-4		
30S/30E-20R01 M	4	791.5	09-22-72	NM-7		5644
			01-24-73	NM-7		
31S/29E-09A01 M		468.0	09-22-72	NM-7		5644
			01-25-73	NM-6		
31S/29E-29A01 M		400.0	09-26-72	159.5	240.5	5001
			01-30-73	142.6	257.4	
31S/30E-21G01 M	4	536.0	09-25-72	369.7	166.3	5644
			02-05-73	372.1	163.9	
32S/28E-23R01 M		386.7	09-28-72	282.4	103.6	5644
			01-31-73	258.8	127.2	
32S/29E-19M02 M		416.0	10-03-72	201.7	214.3	5000
			02-01-73	200.9	215.1	
32S/29E-19M03 M		416.0	10-03-72	360.3	55.7	5000
			02-01-73	319.3	96.7	
BUENA VISTA W S D				52242		
27S/22E-21F02 M		240.0	10-10-72	17.0	223.0	5121
			02-02-73	18.0	222.0	
27S/22E-32H01 M	1	241.0	10-10-72	NM-5		5000
			02-02-73	134.0	107.0	
28S/22E-09D01 M	3	240.0	10-10-72	14.5	225.5	5000
			02-02-73	11.5	228.5	
28S/23E-31R01 M		257.8	10-03-72	32.1	225.7	5640
			03-00-73	54.5	203.3	
29S/23E-08A01 M		260.3	10-04-72	48.7	210.3	5640
			03-00-73	69.7	189.3	
29S/23E-27M01 M	1	270.0	10-10-72	53.5	216.5	5000
			01-31-73	49.5	220.5	
30S/23E-01D01 M		276.8	10-04-72	73.7	203.1	5640

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
BUENA VISTA W S D				52242		
30S/23E-01D01 M		276.8	03-00-73	86.4	190.4	5640
30S/24E-02C01 M		287.0	10-04-72	98.8	189.9	5640
			03-00-73	109.8	178.9	
30S/24E-04C01 M	1	282.0	10-04-72	84.5	197.5	5000
			01-31-73	81.5	200.5	
31S/25E-27F01 M	1	283.0	10-02-72	NM-5		5000
			01-31-73	NM-6		
SEMITROPIC W S D				52243		
25S/22E-02N02 M	1	212.0	10-13-72	NM-9		5000
			02-09-73	73.4	138.6	
25S/22E-14G01 M		215.0	10-13-72	264.5	- 49.5	5121
			02-09-73	NM-9		
25S/23E-28D01 M	1	217.0	10-13-72	113.0	104.0	5000
			02-09-73	NM-9		
25S/23E-28D03 M	2	217.0	10-13-72	292.0	- 75.0	5000
			02-09-73	NM-9		
25S/24E-10K01 M	1	240.0	09-25-72	62.8	177.2	5001
			01-29-73	61.7	178.3	
25S/24E-15M01 M		248.0	09-25-72	80.2	167.8	5000
			01-29-73	76.8	171.2	
25S/24E-30H01 M		237.4	10-13-72	NM-3		5001
			02-09-73	NM-3		
26S/21E-14J01 M	1	237.0	10-16-72	29.0	208.0	5121
			02-27-73	30.0	207.0	
26S/22E-10G02 M	1	225.0	10-13-72	NM-7		5000
			02-27-73	NM-4		
26S/23E-02R01 M	2	234.9	10-12-72	NM-1		5121
			02-09-73	NM-9		
26S/24E-23H01 M	2	295.5	09-25-72	NM-9		5050
			01-29-73	205.8	89.7	
27S/23E-01R01 M	1	267.0	10-11-72	100.5	166.5	5000
			02-08-73	98.5	168.5	
27S/23E-01R04 M	2	267.0	10-11-72	280.5	- 13.5	5000
			02-08-73	226.5	40.5	
27S/23E-01R05 M	2	267.0	10-11-72	279.5	- 12.5	5000
			02-08-73	223.5	43.5	
27S/23E-06L01 M		258.0	10-11-72	33.0	225.0	5121
			02-08-73	32.0	226.0	
28S/23E-11E01 M		255.0	10-03-72	34.8	220.2	5640
			03-00-73	36.6	218.4	
29S/24E-14R01 M	1	290.0	10-05-72	53.0	237.0	5121
			02-01-73	57.0	233.0	
AVENAL-MCKITTRICK AREA				52244		
23S/19E-26M01 M	1	267.0	08-21-72	NM-9		5050
			10-30-72	73.0	194.0	
			01-19-73	62.5	204.5	
			04-16-73	62.5	204.5	
25S/19E-20D02 M	1	480.0	10-11-72	117.0	363.0	5000
			02-27-73	115.0	365.0	
25S/20E-04C01 M	1	268.0	08-22-72	NM-9		5121
			10-30-72	55.0	213.0	
			01-22-73	57.0	211.0	
			04-16-73	59.0	209.0	
26S/18E-19B02 M	1	875.0	10-16-72	178.0	697.0	5121
			02-27-73	NM-9		
28S/22E-20M01 M		290.0	08-23-72	DRY		5050
			10-31-72	66.0	224.0	
			01-24-73	66.0	224.0	
			02-02-73	NM-5		5121
			04-17-73	NM-9		5050
TULARE LAKE-LOST HILLS AREA				52245		
22S/19E-18P02 M	1	255.0	08-21-72	181.0	74.0	5050
			10-30-72	180.0	75.0	
			01-08-73	178.0	77.0	
			01-19-73	177.0	78.0	
			04-16-73	179.0	76.0	
22S/21E-01J01 M	2	185.5	04-13-73	NM-1		5050
23S/19E-14R01 M	1	235.0	08-21-72	18.7	216.3	5050
			10-30-72	42.0	193.0	
			01-19-73	NM-9		
			04-16-73	36.2	198.8	
24S/20E-21N02 M	1	233.0	08-21-72	NM-9		5050
			10-30-72	NM-9		
			01-22-73	NM-9		
			04-16-73	NM-9		
24S/21E-15J01 M		211.0	04-12-73	NM-5		5050
24S/21E-26R01 M		210.0	04-12-73	NM-5		5050
TULARE LAKE-LOST HILLS AREA				52245		
24S/22E-28A02 M		207.0	10-11-72	258.0	- 51.0	5050
			04-12-73	NM-9		
24S/22E-35E01 M		213.0	10-11-72	NM-1		5050
			04-12-73	189.0	24.0	
25S/21E-30K01 M	1	237.5	08-22-72	36.0	201.5	5050
			10-31-72	35.6	201.9	
			01-22-73	35.4	202.1	
			02-27-73	NM-9		5121
			04-17-73	35.5	202.0	5050
CORCORAN I D				52246		
20S/22E-35R01 M	1	216.0	10-11-72	80.0	136.0	5050
			04-12-73	52.0	164.0	
21S/22E-21P01 M	2	192.0	04-12-73	NM-6		5050
21S/22E-27A01 M		196.0	10-11-72	13.0	183.0	5050
			04-12-73	10.5	185.5	
22S/22E-01R02 M		201.0	04-12-73	8.5	192.5	5050
22S/22E-05L01 M	2	188.0	04-12-73	NM-5		5050
22S/22E-10A01 M	2	192.0	10-11-72	158.0	34.0	5050
			04-12-73	112.0	80.0	
22S/22E-13P01 M	1	193.0	10-11-72	25.0	168.0	5050
			04-12-73	15.5	177.5	
22S/22E-15C01 M	2	191.0	10-11-72	150.0	41.0	5050
			04-12-73	110.5	80.5	
22S/22E-22M01 M	2	191.0	10-11-72	162.0	29.0	5050
			04-12-73	115.0	76.0	
MENDOTA-HURON AREA				52247		
13S/12E-22N01 M	2	280.0	10-04-72	138.8	141.2	5001
14S/15E-18E02 M		178.0	10-11-72	190.0	- 10.5	5050
			02-21-73	171.1	8.4	5001
15S/14E-15E04 M		236.0	10-09-72	283.0	- 47.5	5000
			02-09-73	NM-9		
15S/15E-22D01 M		176.0	10-09-72	NM-1		5001
			02-09-73	NM-9		
15S/16E-17L01 M		165.0	10-12-72	34.6	130.4	5000
			02-22-73	43.5	121.5	
15S/16E-28A04 M		169.0	10-09-72	161.4	7.1	5620
			02-20-73	149.5	14.5	5050
			03-05-73	145.5	23.0	5620
17S/14E-13R01 M	1	457.0	01-15-73	NM-1		5050
			02-20-73	NM-3		
17S/16E-24R01 M		232.5	01-15-73	148.0	84.5	5000
			02-20-73	178.0	54.5	
17S/16E-30A03 M		290.0	10-05-72	63.5	226.5	5000
			02-08-73	64.4	225.6	
17S/16E-30A06 M		302.0	10-05-72	430.5	- 140.5	5000
			02-08-73	405.5	- 115.5	
17S/17E-20N01 M	3	228.0	02-23-73	291.0	- 63.0	5050
18S/17E-12N01 M	2	253.0	02-22-73	287.0	- 34.0	5050
19S/18E-15M01 M	2	274.0	02-21-73	300.0	- 26.0	5050
20S/17E-32F01 M		447.0	02-21-73	NM-3		5050
20S/18E-11N01 M	3	277.0	02-21-73	364.0	- 87.0	5050
20S/18E-36D01 M		260.0	02-20-73	247.0	13.0	5000
21S/18E-28M02 M		363.0	01-15-73	333.0	30.0	5000
			02-20-73	346.0	17.0	
POSO SOIL C D				52248		
11S/13E-05D01 M		117.0	10-10-72	8.2	109.0	5529
TERRA BELLA I D				52250		
22S/27E-25J03 M		532.0	09-28-72	114.4	417.6	5001
			01-31-73	103.1	428.9	
23S/27E-01A01 M		506.0	09-29-72	86.0	420.0	5001
			02-02-73	86.7	419.3	
23S/27E-05A01 M	4	450.0	09-29-72	NM-1		5001
			02-02-73	156.3	293.7	
MERCED BOTTOMS				52254		
07S/10E-23K01 M		80.0	10-16-72	27.5	52.5	5050

TABLE C-3 (Cont.)
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	AQUIFER	GROUND ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY CODE
MERCED BOTTOMS				52254		
07S/10E-23K01 M	2	80.0	04-12-73	3.4	76.6	5050
			04-12-73	3.4	75.6	
07S/10E-23K02 M		80.0	10-16-72	4.0	76.0	5050
			04-12-73	1.8	78.2	
07S/12E-27F01 M		110.5	10-16-72	28.0	82.5	5050
			04-19-73	5.1	104.4	
08S/12E-19Q01 M		90.0	04-19-73	8.6	81.4	5050
09S/12E-01C01 M	1	110.5	10-16-72	50.0	60.5	5050
			04-17-73	19.0	91.5	
09S/14E-01B01 M		180.0	10-16-72	99.0	81.0	5050
			04-17-73	63.3	116.7	
09S/14E-01B02 M		180.0	10-16-72	99.0	81.0	5050
			04-17-73	61.3	118.7	
09S/14E-01B03 M		180.0	10-16-72	42.0	138.0	5050
			04-17-73	39.3	140.7	
09S/14E-06Q01 M		141.0	10-10-72	46.8	94.2	5001
			10-16-72	52.0	89.0	5050
			02-08-73	46.3	94.7	5001
			04-18-73	37.4	103.6	5050
GARFIELD W D				52265		
12S/20E-13A01 M	4	388.0	10-10-72	NM-0		5001
12S/21E-07A02 M	4	405.5	10-10-72	128.6	276.9	5001
			02-12-73	124.0	281.5	
12S/21E-18A03 M	4	390.5	10-10-72	93.1	297.4	5001
			02-12-73	91.7	298.8	
KINGS COUNTY W D				52266		
17S/20E-36R02 M	1	243.0	10-02-72	17.9	225.1	5129
			02-19-73	18.0	225.0	
17S/22E-11P01 M	1	283.0	10-02-72	37.7	245.3	5129
			02-16-73	28.0	255.0	
17S/22E-35N01 M	1	266.0	10-02-72	55.4	210.6	5129
			02-16-73	45.3	220.7	
18S/21E-17N01 M	1	238.0	10-03-72	10.3	227.7	5129
			02-27-73	13.5	224.5	
18S/22E-21M01 M	1	258.0	10-02-72	85.0	173.0	5129
			03-01-73	81.8	176.2	
18S/22E-36P01 M		245.0	09-28-72	106.7	138.3	5001
			02-15-73	NM-9		
18S/23E-28R01 M	1	263.0	10-05-72	101.0	162.0	5129
			02-16-73	86.6	176.4	
19S/21E-20N01 M	1	225.0	10-03-72	12.6	212.4	5129
			02-21-73	12.7	212.3	
19S/22E-04B01 M	1	245.0	10-02-72	96.6	148.4	5129
			02-16-73	85.7	159.3	
19S/22E-19A01 M	2	235.0	10-02-72	108.3	126.7	5001
			02-16-73	83.3	151.7	
19S/22E-23A01 M		240.0	10-02-72	95.1	145.4	5129
			10-28-72	96.0	144.5	5603
			02-07-73	81.5	159.0	5603
			02-16-73	82.8	157.7	5129
20S/21E-03A01 M	1	222.0	09-29-72	14.5	205.5	5001
			02-13-73	14.5	205.5	
20S/21E-05E01 M	2	219.0	10-03-72	167.0	52.0	5129
			02-26-73	124.3	94.7	
20S/22E-10H02 M	2	225.0	10-10-72	139.6	85.4	5129
			02-20-73	105.7	119.3	
PLEASANT VALLEY				52269		
20S/15E-25D01 M	1	319.0	02-09-73	236.0	383.0	5050
20S/15E-32A01 M	1	675.0	02-09-73	244.0	431.0	5050
21S/16E-02N01 M	1	570.0	02-26-73	NM-1		5050
21S/16E-07N01 M	1	634.0	02-26-73	270.0	364.0	5050
21S/16E-35Q01 M	1	682.0	02-26-73	342.0	340.0	5050

TABLE C-4

GROUND WATER RECHARGE
Amounts Applied in Acre-Feet

GROUND WATER DISTRICTS OR AREAS		SOURCE OF SUPPLY	1970-71			1971-72			1972-73		
NAME	NUMBER		METHOD	AMOUNT	TOTAL	METHOD	AMOUNT	TOTAL	METHOD	AMOUNT	TOTAL
Alpaugh I. D. Western Portion of Alpaugh-Allensworth Area	5-22.34	CVP	p	300	300	c & n p	300 20	320	n p	500 300	800
Arvin-Edison W. S. D. Eastern Portion of Edison-Maricopa Area	5-22.41	CVP	None Reported			a	18,500	18,500	a	55,900	55,900
Buena Vista W. S. D.	5-22.42	Kern River CVP Cal. Aqueduct	c n p	22,650 9,350 13,000	45,000	c n p	16,800 5,350 10,000	32,150	c n o	13,000 12,240 11,760	37,000
Chowchilla W. D.	5-22.12	CVP Chowchilla River	a c n	334 31,000 9,500	40,834	None Reported			c n	26,008 20,000	46,008
Consolidated I. D.	5-22.18	Kings River CVP	c	56,000	56,000	c	35,000	35,000	a c	140,000 100,000	240,000
Corcoran I. D.	5-22.46	Kings River Cross Creek	c	9,522	9,522	a c	7,811 27,265	35,076	a c	3,000 8,837	11,837
Delano-Earlimart I. D.	5-22.35	CVP	a	128	128			0	a n	924 1,588	2,512
Dudley Ridge W. D. Western Portion of Tulare Lake-Lost Hills Area	5-22.45	Cal. Aqueduct	c p	1,400 6,000	7,400			0	c p	1,650 5,100	6,750
El Nido I. D.	5-22.10	Merced I. D. Mariposa Creek Deadman Creek	o	829	829	None Reported			o	2,000	2,000
El Solyo W. D., 3 mi west of Modesto I.D.		San Joaquin River	c	1,488	1,488	c	2,127	2,127	c	2,057	2,057
Exeter I. D.	5-22.26	CVP Foothill Ditch Co.	n	840	840	n	755	755	n	583	583
Fresno City Water Division	5-22.16	Kings River	a	4,309	4,309	a	9,773	9,773	a	14,400	14,400
Fresno Metropolitan Flood Control District	5-22.16	Fresno I. D.	None Reported			None Reported			a	332	332*
Fresno I. D.	5-22.15	CVP Kings River	a c n p	3,138 79,113 54 134,492	216,797	a c n p	430 59,427 15 118,855	178,727	a c n o p	6,079 86,824 577 1,458 147,602	242,540
Hacienda W. D. Southern Portion of Tulare Lake - Lost Hills Area	5-22.45	Cal. Aqueduct Goose Lake Canal	o	400	400	c n o p	50 50 300 300	700	c p	952 238	1,190
Henry Miller W. D. Southwest Portion Kern River Delta Area		Cal. Aqueduct Buena Vista Water Storage District	c n	1,400 162	1,562	c n p	2,315 1,094 1,431	4,840	Included with Buena Vista Water Storage District		
International W. D. Eastern San Joaquin Valley, 10 miles northeast Fresno		CVP			0	None Reported			a p	100 100	200
Ivanhoe I. D.	5-22.23	CVP Wutchumna Water Co.	a n	310 313	623	a n	162 66	228	a i n	356 133 1,006	1,495
Kern Delta W. D.	5-22.40	Cal. Aqueduct	c	2,572	2,572			0	c & p	2,827	2,827
Kings County W. D.	5-22.66	CVP	a	9,983	9,983	None Reported			a,c,n	121,107	121,107
Laguna W. D.	5-22.20	CVP	None Reported			None Reported			None Reported		
Lakeside W. D. Western Portion of Kaweah Delta W. C. D.	5-22.24	CVP Kaweah River Kings River	None Reported			None Reported			a c	18,058 32,426	50,484
Lindmore I. D.	5-22.28	CVP	None Reported			None Reported			None Reported		
Lindsay-Strathmore I. D.	5-22.27	CVP Wutchumna Water Co.	None Reported			None Reported			None Reported		
Lower Tule River I.D.	5-22.30	CVP Tule River	a c	6,893 63,815	70,708	None Reported			a c	34,702 114,067	148,769
Madera I. D.	5-22.13	CVP Fresno River	a c n p	4,828 54,133 8,655 124,491	192,107	a c n p	3,010 34,429 3,267 66,456	107,162	a c n	6,330 46,383 19,519	72,232
Merced I. D.	5-22.09	Merced River Wells	None Reported			None Reported			c p	130,000 70,000	200,000
Modesto I. D.	5-22.07	Tuolumne River	None Reported			None Reported			c p	20,000 20,000	40,000
North Kern W. S. D.	5-22.37	Kern River Poso Creek	a c n p	770 6,158 468 22,352	29,748	None Reported			a c p	29,191 27,973 74,936	132,100

* Does not include significant quantities of storm runoff recharged into artificial basins.

TABLE C-4 (Cont'd)

GROUND WATER RECHARGE
Amounts Applied in Acre-Feet

GROUND WATER DISTRICTS OR AREAS		SOURCE OF SUPPLY	1970-71			1971-72			1972-73		
NAME	NUMBER		METHOD	AMOUNT	TOTAL	METHOD	AMOUNT	TOTAL	METHOD	AMOUNT	TOTAL
Oakdale I. D.	5-22.06	Stanislaus Reclaimed Drain Water	c & p	55,690	55,690	None Reported					0
Patterson W. D. Central Portion of Delta-Mendota Area	5-22.11	San Joaquin River CVP	c p	2,000 3,000	5,000			0			0
Pixley I. D.	5-22.33	CVP	c	5,402	5,402			0			0
Porterville I. D.	5-22.29	CVP Tule River	a c n	1,000 7,000 4,800	12,800	c n	4,741 1,500	6,241	a c n	4,400 3,800 2,400	10,600
Porterville State Hospital	5-22.29	Campbell-Moreland Ditch Co.	None Reported			None Reported			a	325	325
Riverdale I. D. Northwest Portion of Lower Kings River Area		Kings River	c	5,344	5,344	None Reported			None Reported		
Rosedale-Rio Bravo W. S. D. - Northern Portion of Kern River Delta Area	5-22.40	Cal. Aqueduct CVP Kern River	None Reported			None Reported			None Reported		
San Luis W. D. West Side of San Joaquin Valley, Los Banos Vicinity		Cal. Aqueduct CVP	c p	2,700 4,400	7,100	c	1,561	1,561	None Reported		
Saucelito I. D.	5-22.32	CVP Tule River	n o p	460 30 1,000	1,490	None Reported			None Reported		
Stratford I. D.	5-22.45	Kings River	None Reported			None Reported			None Reported		
Terra Bella I. D.	5-22.50	CVP Deer Creek Diversion Wells	c	834	834	c	571	571	c	571	571
Tulare I. D.	5-22.25	CVP Kaweah River	a,c,n	43,891	43,891	a,c,n,p	24,000	24,000	a,c,n	90,997	90,997
Vandalia I. D.	5-22.31	Tule River	a	2,700	2,700	a	1,450	1,450	None Reported		
Waterford I. D. Eastern San Joaquin Valley, East of Modesto	5-22.07	Tuolumne River Wells	None Reported			c p	4,300 6,400	10,700	c p	4,000 6,100	10,100
West Kern County W. D.	5-22.41	KCWA, Wells BVWSD & Kern River	n	3,121	3,121	n	7,523	7,523	n	16,475	16,475
Widren W. D. Northern Portion Mendota-Huron Area	5-22.47	CVP Drainage	p	200	200	None Reported			c o p	200 800 500	1,500

CVP Central Valley Project
n Natural stream channels
c Canals
a Artificial recharge basins
o Open land spreading
i Injection method
p Other--percolation from irrigation
m No method indicated

APPENDIX D

SURFACE WATER QUALITY

APPENDIX D

SURFACE WATER QUALITY

Introduction

Appendix D summarizes the surface water quality for the San Joaquin Valley for 1973 water year (October 1, 1972, through September 30, 1973). These data were obtained from 101 surface water quality sampling stations.

Laboratory analyses of surface water samples performed by the Department of Water Resources' laboratory reported herein are in accordance with the 13th edition of "Standard Methods for the Examination of Water and Waste Water".

Each station in this appendix has been assigned an eight digit identification number. The first two digits denote the drainage basin as shown below; the remaining digits identify each station.

Hydrographic Area B San Joaquin River Basin		Hydrographic Area C Tulare Lake Drainage Basin	
B0	San Joaquin Valley Floor	C0	Tulare Lake Valley Floor
B3	Stanislaus River	C1	Kings River
B4	Tuolumne River	C2	Kaweah River
B5	Merced River	C3	Tule River
B6	Fresno-Chowchilla Rivers	C4	Greenhorn Mountains
B7	San Joaquin River	C5	Kern River
B8	San Joaquin Valley on West Side	C6	Tehachapi Mountains
		C7	Tulare Lake Basin on West Side

TABLE D-I

SAMPLING STATION DATA AND INDEX FOR SURFACE WATER

Station	Station Identification Number	Location[a]	Period[b] of Record	Frequency[c] of Sampling	Sampled[d] By	Analysis on Page
Avenal Creek at Highway 41	C07130.30	24S/17E-13	--		DWR	168
Bitter Creek at Highway 33	C69550.30	11N/23W-09	--		DWR	169
Bitterwater Creek 3.5 miles east of Bitterwater Pumping Station	C71818.50	27S/18E-22	--		DWR	169
Brite Creek at Banducci Road	C61545.10	32S/32E-34	--		T-CWD	169
Caliente Creek at Neumakel Road	C01349.50	30S/30E-17	--		DWR	167
Canoas Creek at Highway 33	C07060.30	22S/16E-01	--		DWR	168
Cantua Creek above Highway 33	C77047.30	17S/15E-30	--		DWR	169
Corral Hollow Creek at Highway 5	B09450.01	03S/05E-18	--		DWR	166
Cottonwood Creek at Highway 65	C02621.50	17S/25E-08	--		DWR	167
Cummings Creek at Banducci Road	C67010.10	12N/16W-33	--		T-CWD	169
Deer Creek at Highway 65	C03559.50	22S/27E-27	--		DWR	167
Del Puerto Creek at Highway 33	B08826.50	05S/07E-11	--		DWR	166
Dog Creek at Highway 168 above Academy	C15130.50	12S/22E-12	--		DWR	169
Dry Creek at Highway 168 below Millerton Road	C15154.50	11S/23E-30	--		DWR	169
Dry Creek near Lemoncove	C02782.00	17S/27E-15	--		DWR	167
El Paso Creek at Rancho Road	C06910.50	11N/18W-18	--		DWR	168
Fancher Creek at Ashlan Avenue	C01505.50	13S/22E-14	--		DWR	167
Fresno River near Daulton	B67150.00	10S/19E-03	January 1958	S	DWR	167, 177, 182
Garzas Creek at Highway 33	B08626.00	08S/09E-19	--		DWR	166
Ingram Creek at Highway 33	B00940.30	04S/07E-18	--		DWR	164
Jacalitos Creek at Jayne Avenue	C07670.30	20S/16E-31	--		DWR	168
Kaweah River below Terminus Dam	C02185.00	17S/27E-25	September 1961	Q	DWR & USACE	167, 177, 182
Kern River near Bakersfield	C05150.00	28S/29E-33	April 1951	Q	DWR	168, 178, 182
Kings River below Peoples Weir	C01140.00	17S/22E-01	April 1951	Q	DWR	167, 171, 177, 182
Kings River below Pine Flat Reservoir	C11140.00	13S/24E-02	September 1955	Q	DWR & USACE	169, 178, 183
Lewis Creek east of Lindsay	C03650.00	20S/27E-09	--		DWR	167
Little Creek at Highway 65 Bridge	C44050.00	27S/27E-08	--		DWR	169
Lone Tree Creek at Highway 5	B09655.01	04S/05E-01	--		DWR	166
Los Banos Creek at Highway 152	B08415.30	10S/10E-17	--		DWR	165
Los Gatos Creek below Jacalitos Creek near Coalinga	C07600.00	20S/16E-26	--		DWR	168
Los Gatos Creek near Coalinga	C07660.30	20S/15E-28	--		DWR	168, 178
Media Agua Creek at Highway 33	C07700.30	27S/20E-22	--		DWR	168
Merced River above Briceburg	B51410.10	03S/18E-25	October 1972	S	DWR	166, 177, 181
Merced River at Bagby	B51320.00	04S/17E-06	November 1952	S	DWR	166, 171, 181
Merced River at El Capitan Bridge	B51540.10	02S/21E-	October 1972	S	DWR & USGS	166, 171, 174, 177, 181
Merced River at Happy Isles Bridge near Yosemite	B51700.00	02S/21E-	--	S	DWR & USGS	167, 171, 174, 177, 181

TABLE D-I (Continued)

SAMPLING STATION DATA AND INDEX FOR SURFACE WATER

Station	Station Identification Number	Location[a]	Period[b] of Record	Frequency[c] of Sampling	Sampled[d] By	Analysis on Page
Merced River at junction Big Oak Flat Road and Highway 140	B51519.50	02S/21E-	February 1973	S	DWR	166, 177, 181
Merced River at Milliken Bridge	B05131.00	06S/09E-36	April 1951	M	DWR	164, 171, 176, 180
Merced River below El Portal	B51517.10	03S/20E-18	October 1972	S	DWR & USGS	166, 171, 174, 177, 181
Merced River below Exchequer Dam	B51200.00	04S/15E-13	April 1951	Q	DWR	166, 171, 174, 177, 181
Merced River South Fork near El Portal	B54100.00	03S/20E-17	July 1973		USGS	167, 171, 174, 177, 182
Mill Creek above Squaw Valley	C13550.30	13S/25E-36	--		DWR	169
Mill Creek near Piedra	C11120.00	13S/24E-10	--		DWR	168
Orestimba Creek at Highway 33	B08735.00	06S/08E-26	--		DWR	166
Panoche Creek at Belmont Avenue	B00970.30	14S/13E-02	--		DWR	164
Pleitito Creek 3.6 miles south of Highway 166	C08012.30	11N/21W-28	--		DWR	168
Poso Creek at head of diversion channel	C04452.30	27S/27E-30	--		DWR	168
Salt Slough near Stevinson	B00470.00	08S/10E-10	December 1961	Q	DWR	164, 176, 180, 186
Sand Creek at Road 128 above Orange Cove	C25102.50	15S/25E-02	--		DWR	169
Sand Creek near Orange Cove	C25100.00	15S/25E-15	--		DWR	169
San Joaquin River at Fremont Ford Bridge	B07375.00	07S/09E-24	July 1955	M	DWR	165, 171, 174, 176, 180, 186
San Joaquin River at Friant Dam	B07885.00	11S/21E-07	April 1951		DWR	165, 176, 180
San Joaquin River at Maze Road Bridge	B07040.00	03S/07E-33	April 1951	M	DWR	165, 176, 180
San Joaquin River near Grayson	B07080.00	04S/07E-25	April 1959	M	DWR	165 171, 174, 176, 180
San Joaquin River near Mendota	B07710.00	13S/15E-07	April 1951	M	DWR	165, 171, 174, 176, 180
San Joaquin River near Vernalis	B07020.00	03S/06E-13	April 1951	M	DWR & USGS	164, 171, 174, 176, 180, 186
Santiago Creek at Highway 33	C69560.30	10N/23W-12	--		DWR	169
Squaw Creek at USFS Fire Control Station	C13580.30	13S/25E-35	--		DWR	169
Stanislaus River at Koetitz Ranch	B03115.00	03S/07E-02	April 1951	M	DWR	164, 176, 180
Stanislaus River below Tulloch Dam	B31158.10	01S/12E-02	August 1956	Q	DWR	166, 171, 174, 176, 180
Tule River below Success Dam	C03195.00	21S/28E-35	July 1956	Q	DWR	167, 178, 182
Tuolumne River at Hickman Bridge near Waterford	B04150.00	03S/11E-33	April 1951		DWR	164, 176, 180
Tuolumne River at La Grange Bridge	B04175.00	03S/14E-20	--		DWR	164, 171, 174, 176, 180
Tuolumne River at Tuolumne City	B04105.00	04S/08E-12	April 1951	M	DWR	164, 176, 180
Unnamed Creek at Highway 33 near Temblor Pumping Station	C07710.30	25S/19E-28	--		DWR	168
Unnamed Creek at Highway 33 1.2 mile south of Lerdo Road	C07720.30	28S/21E-17	--		DWR	168
Unnamed Temblor Valley drainage	C07210.30	29S/22E-19	--		DWR	168
Warthan Creek near Coalinga	C07650.50	20S/15E-33	--		DWR	168
White River at Highway 65	C04150.00	24S/27E-03	--		DWR	168
Yokohl Creek at Friant-Kern Canal crossing near Exeter	C28170.00	18S/27E-24	--		DWR	169
Zapata Creek near Avenal	C07050.00	21S/16E-27	--		DWR	168

TABLE D-1 (Continued)

SAMPLING STATION DATA AND INDEX FOR SURFACE WATER

Station	Station Identification Number	Location[a]	Period[b] of Record	Frequency[c] of Sampling	Sampled[d] By	Analysis on Page
Big Creek above Pine Flat Reservoir	C11320.00	11S/25E-4		S	DWR	183
Kaweah River above Lake Kaweah	C21210.30	17S/28E-34		S	DWR	178, 183
Kaweah River at Lemoncove	C02550.30	18S/27E-3		S	DWR	178, 182
Kaweah River Middle Fork below No. 2 Intake near Three Rivers	C23147.00	16S/29E-33		S	DWR	178, 183
Kaweah River North Fork near Mouth	C22010.30	17S/28E-13		S	DWR	178, 183
Kaweah River South Fork above Grouse Creek	C24201.50	18S/29E-16		S	DWR	178, 183
Kern River above Fairview	C51660.10	23S/32E-12		S	DWR	178, 183
Kern River at Hart Park	C05160.10	28S/28E-36		S	DWR	178, 182
Kern River at Kernville	C51500.00	25S/33E-15		S	DWR	178, 183
Kern River at Miracle Hot Springs	C51220.10	27S/32E-15		S	DWR	178, 183
Kern River at Rancheria Bridge	C05180.10	29S/29E-11		S	DWR	178, 182
Kern River South Fork near Weldon	C53110.10	26S/34E-10		S	DWR	178, 184
Kings River below North Fork	C11460.00	12S/26E-21		S	DWR	183
Kings River South Fork at Cedar Grove	C14115.30	13S/30E-1		S	DWR	183
San Joaquin River below Shakeflat Creek	B71532.50	7S/24E-10		S	DWR	182
San Joaquin River South Fork at Mono Hot Springs	B74250.50	7S/27E-10		S	DWR	182
San Joaquin River above Willow Creek near Auberry	B71340.00	9S/23E-15		S	DWR	182
Stanislaus River at Knights Ferry	B03185.00	1S/12E-29		S	DWR	176, 180
Stanislaus River Middle Fork at Beardsley	B33255.00	5N/18E-31		S	DWR	177, 181
Stanislaus River Middle Fork at Dardanelle	B33480.10	6N/20E-30		S	DWR	177, 181
Stanislaus River North Fork at Calaveras Big Trees State Park	B32110.10	5N/15E-24		S	DWR	177, 181
Stanislaus River at Parrotts Ferry Bridge	B31400.50	2N/13E-9		S	DWR	176, 181
Tule River North Fork at Bear Creek Road	C32190.10	20S/29E-35		S	DWR	178, 183
Tule River below Springville	C31929.30	21S/29E-17		S	DWR	178, 183
Tule River South Fork above Crew Creek	C34149.30	22S/29E-4		S	DWR	178, 183
Tule River South Fork of Middle Fork near Springville	C33200.00	20S/30E-		S	DWR	178, 183
Tule River at Worth Bridge near Porterville	C03195.00	21S/28E-35		S	DWR	178, 182
Tuolumne River above Early Intake	B41680.10	1S/18E-1		S	DWR	181
Tuolumne River at Tuolumne Meadows	B41850.10	1S/24E-3		S	DWR	181
Tuolumne River at Wards Ferry Bridge	B41290.10	1S/15E-2		S	DWR	181

a. Locations are in reference to Mt. Diablo Base and Meridian.
b. Beginning of record (-- indicates an irregular period of record).
c. M - Monthly, Q - Quarterly, S - Semiannually, all others irregular.
d. DWR - Dept. of Water Resources, USACE - U. S. Army Corps of Engineers, USGS - U. S. Geological Survey, T-CWD - Tehachapi-Cummings Water District.
e. Location of sampling stations are shown on Figure B-1.

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

This table presents analyses performed by the Department of Water Resources' Bryte Laboratory and the U. S. Geological Survey's Sacramento or Salt Lake City laboratory.

The sampler and laboratory codes are as follows:

5000 U. S. Geological Survey

5050 Department of Water Resources

5647 Tehachapi-Cummings Water District

Definitions of chemical symbols and abbreviations used in this table are as follows:

Chemical Symbols

CA	Calcium	SO_4	Sulfate
MG	Magnesium	CL	Chloride
NA	Sodium	NO_3	Nitrate
K	Potassium	F	Fluoride
CO_3	Carbonate	B	Boron
HCO_3	Bicarbonate	SiO_2	Silica

Abbreviations

TEMP	Temperature	DO	Dissolved Oxygen
SAT	Percent Saturation	GH	Gage Height
Q	Flow	FLD	Field Determination
LAB	Laboratory	EC	Specific Electrical Conductance in Micromhos
pH	Measurement of Acidity or Alkalinity of Water	TDS	Total Dissolved Solids
SUM	Summation of Analyzed Constituents	TH	Total Hardness
NCH	Noncarbonate Hardness	TURB	Turbidity in Turbidity Units
SAR	Sodium Adsorption Ratio		

REM Remarks as follows:

T Total Dissolved Solids and the calculated sum of constituents are <u>not</u> within 20 percent of each other.

E Total Dissolved Solids value is <u>not</u> within the range of 0.35 to 0.70 of the Specific Electrical Conductance.

S The anion and cation sums are <u>not</u> within the prescribed tolerance of ±5 percent.

X The field EC and the laboratory EC are <u>not</u> within 20 percent of each other.

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR	REM
							MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER					
	80	0470.00			SALT SLOUGH NR STEVINSON																
02/08/73	5050	65.25	8.7	58 F	7.8	2600	157	69	454	--	0	262	--	493	14.0	4.10	--		677		X
1005	5050		85	14 C	7.7	3270	7.83	5.67	19.75		.00	4.29		13.90	.23		--		461	7.6	
							24	17	59			23		75	1						
02/22/73	5050		8.4	59 F	7.6	2200	138	62	400	6.6	0	252	598	466	11.0	3.40	--	1900	600		X
1200	5050		83	15 C	7.8	2900	6.89	5.11	17.40	.17	.00	4.13	12.45	13.14	.18		--	1809	394	7.1	
							23	17	59	1		14	42	44	1						
07/19/73	5050	21.08	7.6	70 F	7.6	1000	--	--	--	--	5.0	160	--	--	--	--	--		260		
0720	5050		85	21 C	8.3	1240					.17	2.62					--				
08/15/73	5050			79 F	7.4	1100	52	25	136	4.4	0	178	116	187	8.7	.40	--	652	233		
0935	5050			26 C	8.1	1160	2.59	2.06	5.92	.11	.00	2.92	2.42	5.27	.14		--	617	87	3.9	
							24	19	55	1		27	23	49	1						
09/24/73	5050	21.76	8.3	66 F	7.6	900	--	--	--	--	--	--	--	--	4.7	.40	--				
0840	5050		89	19 C		1070									.08		--				
	80	0940.30			INGRAM CREEK AT HIGHWAY 33																
02/16/73	5050						32	21	89	--	0	204	--	35	6.2	1.70	--		166		
0900	5050				8.0	621	1.60	1.73	3.87		.00	3.34		.99	.10		--		0	3.0	
							22	24	54			75		22	2						
	80	0970.30			PANOCHE CREEK AT BELMONT AVENUE																
02/15/73	5050						54	17	108	--	0	121	--	38	14.0	.80	--		204		
1345	5050				7.4	899	2.69	1.40	4.70		.00	1.98		1.07	.23		--		106	3.3	
							31	16	53			60		33	7						
	80	3115.00			STANISLAUS RIVER AT KOETITZ RANCH																
01/24/73	5050	34.36	11.1	47 F	7.4	80	9.1	4.4	3.9	--	0	47	--	1.6	2.7	.10	--		40		X
1330	5050		94	8 C	7.4	102	.45	.36	.17		.00	.77		.05	.04		--		2	0.3	
							46	37	17			90		6	5						
07/19/73	5050	28.20	11.8	76 F	7.8	190	--	--	--	--	0	103	--	--	--	--	--		82		
1230	5050		140	24 C	8.2	211					.00	1.69					--				
	80	4105.00			TUOLUMNE RIVER AT TUOLUMNE CITY																
01/24/73	5050	25.38	10.5	49 F	7.2	240	16	5.8	23	2.3	0	59	4.9	46	3.6	.10	--	157	64		
1250	5050		92	9 C	7.4	269	.80	.48	1.00	.06	.00	.97	.10	1.30	.06		--	131	16	1.3	
							34	21	43	3		40	4	53	2						
07/19/73	5050	23.01	11.4	75 F	8.2	700	--	--	--	--	0	142	--	--	--	--	--		162		
1200	5050		134	24 C	8.1	707					.00	2.33					--				
	80	4150.00			TUOLUMNE RIVER AT HICKMAN BRIDGE NR WATERFORD																
07/26/73	5050	69.88	10.2	78 F	8.0		--	--	--	--	4.0	99	--	--	--	--	--		109		
0715	5050		124	26 C	8.6	455					.13	1.62					--				
09/25/73	5050	69.69	8.1	65 F	7.4	450	--	--	--	--	--	--	--	--	--	--	--				
0700	5050		86	18 C		533											--				
	80	4175.00			TUOLUMNE RIVER AT LA GRANGE BRIDGE																
07/26/73	5050		12.1	60 F	7.0		--	--	--	--	0	24	--	--	--	--	--		19		
0845	5050		122	16 C	8.0	49					.00	.39					--				
09/25/73	5050		9.2	67 F	6.8	44	5.2	1.9	3.7	1.0	0	26	2.3	1.9	1.2	.00	--	38	21		X
0920	5050		100	19 C	7.7	57	.26	.16	.16	.03	.00	.43	.05	.05	.02		--	30	0	0.4	T
							43	26	26	5		78	9	9	4						S
	80	5131.00			MERCED RIVER AT NILLIKEN BRIDGE																
01/24/73	5050		10.5	49 F	7.2	125	14	4.4	12	--	0	69	--	5.8	7.1	.00	--		54		X
1120	5050		92	9 C	7.7	167	.70	.36	.52		.00	1.13		.16	.11		--		0	0.7	
							44	23	33			81		11	8						
07/19/73	5050		12.2	72 F	7.4	150	--	--	--	--	1.0	70	--	--	--	--	--		54		
0900	5050		139	22 C	8.3	167					.03	1.15					--				
09/24/73	5050		9.5	68 F	8.2	110	--	--	--	--	--	--	--	--	--	--	--				
1000	5050		104	20 C		124											--				
	80	7020.00			SAN JOAQUIN RIVER NEAR VERNALIS																
10/19/72	5050	10.98	6.0	61.7F	7.4	325	30	16	72	3.7	0	129	57	100	--	.22	.3		140	20C	X
0700	5000		61	16.5C	6.9	662	1.50	1.32	3.13	.09	.00	2.11	1.19	2.82			20.0	362	36	2.6	
							25	22	52	1		34	19	46							
11/15/72	5050	11.52	8.9	54 F	7.4	550	31	15	79	5.4	0	146	63	100	--	.32	.3		140	50C	
0830	5000		82	12 C	6.6	595	1.55	1.23	3.44	.14	.00	2.39	1.31	2.82			18.0	384	20	2.9	
							24	19	54	2		37	20	43							
12/14/72	5050		11.5	41.0F	7.4	440	33	17	88	2.8	0	118	91	100	--	.41	.3		150	7C	X
0830	5000		90	5.0C	7.3	702	1.65	1.40	3.83	.07	.00	1.93	1.89	2.82			14.0	404	56	3.1	
							24	20	55	1		29	28	42							
01/24/73	5050		9.7	46 F	7.4	420	30	15	77	3.7	0	114	91	81	--	.48	.2		140	40C	X
1035	5000		82	8 C	7.5	644	1.50	1.23	3.35	.09	.00	1.87	1.89	2.28			17.0	371	43	2.9	
							24	20	54	1		31	31	38							
02/23/73	5050	18.96	8.2	54 F	7.4	800	25	11	55	3.2	0	106	61	58	--	.31	.2		110	30C	X
0750	5000		76	12 C	7.6	492	1.25	.90	2.39	.08	.00	1.74	1.27	1.64			17.0	283	21	2.3	
							27	19	52	2		37	27	35							

TABLE D-2 (Cont'd)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR	REM
							MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER					
80	7020.00				SAN JOAQUIN RIVER NEAR VERNALIS													CONTINUED			
04/18/73	5050	13.72	9.9	59.0F	7.4	500	34	17	73	3.1	0	117	75	96	--	.31	.0		160	30C	X
0915	5000		98	15.0C	7.5	666	1.70	1.40	3.18	.08	.00	1.92	1.56	2.71			18.0	374	59	2.6	
							27	22	50	1		31	25	44							
05/17/73	5050	11.82	9.0	73 F	7.6	700	37	18	78	3.7	0	139	69	110	--	.25	.3		170	30C	
0730	5000		104	23 C	6.9	717	1.85	1.48	3.39	.09	.00	2.28	1.44	3.10			23.0	407	53	2.6	
							27	22	50	1		33	21	45							
06/15/73	5050	11.84	9.1	64.4F	7.6	450	29	14	53	2.2	0	107	36	85	--	.13	.1		130	30C	X
0700	5000		96	18.0C	8.0	566	1.45	1.15	2.31	.06	.00	1.75	.75	2.40			14.0	286	43	2.0	
							29	23	46	1		36	15	49							
06/26/73	5000			77.0F	8.3	773	41	20	88	3.7	0	158	60	130	--	--	.3	453	180	40C	
1030	5000			25.0C	7.8	799	2.05	1.64	3.83	.09	.00	2.59	1.42	3.67			16.0	444	55	2.8	
							27	22	50	1		34	18	48							
07/19/73	5050	9.78	9.4	70 F	8.1	900	49	25	110	4.4	0	184	90	170	--	.35	.2		230	40C	
0715	5000		105	21 C	7.5	992	2.45	2.06	4.79	.11	.00	3.02	1.87	4.79			18.0	557	75	3.2	
							26	22	51	1		31	19	49							
07/25/73	5000			75.2F	8.3		41	21	91	4.1	0	160	71	130	--	--	.2	510	190	60C	
1030	5000			24.0C	7.9	836	2.05	1.73	3.96	.10	.00	2.62	1.48	3.67			17.0	454	58	2.9	
							26	22	51	1		34	19	47							
08/16/73	5050	10.06	9.7	77.0F	7.7	820	46	22	110	4.5	0	174	69	150	--	.29	.2		210	40C	
0830	5000		116	25.0C	8.1	902	2.30	1.81	4.79	.12	.00	2.85	1.44	4.23			18.0	505	63	3.3	
							25	20	53	1		33	17	50							
80	7040.00				SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE																
01/24/73	5050	18.92	10.8	49 F	8.4	850	38	19	102	--	0	134	--	112	9.1	.70	--		174		
1430	5050		94	9 C	7.7	878	1.90	1.56	4.44		.00	2.20		3.16	.15		--		63	3.4	
							24	20	56			40		57	3						
07/19/73	5050	13.82	12.2	75 F	8.4	1000	--	--	--	--	2.0	184	--	--	--	--	--		257		
1320	5050		143	24 C	8.4	1140					.07	3.02					--				
80	7080.00				SAN JOAQUIN RIVER NEAR GRAYSON																
01/24/73	5050		10.4	48 F	7.8	800	37	30	136	--	0	164	--	138	11.0	.90	--		216		X
1230	5050		90	9 C	7.9	1100	1.85	2.47	5.92		.00	2.69		3.89	.18		--		82	4.0	
							18	24	58			40		58	3						
07/19/73	5050		13.9	75 F	8.2	1100	--	--	--	--	8.0	189	--	--	--	--	--		279		
1100	5050		164	24 C	8.4	1260					.27	3.10					--				
09/24/73	5050		7.9	68 F	7.9	800	40	20	100	3.9	1.0	168	82	115	15.0	.20	--	481	183		
1130	5050		86	20 C	8.3	847	2.00	1.64	4.35	.10	.03	2.75	1.71	3.24	.24		--	460	43	3.2	
							25	20	54	1		35	21	41	3						
80	7375.00				SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE																
01/24/73	5050	59.98	10.9	48 F	8.0	900	63	28	148	--	0	148	--	172	13.0	1.20	--		271		X
1020	5050		94	9 C	7.6	1270	3.14	2.30	6.44		.00	2.43		4.85	.21		--		151	3.9	
							26	19	54			32		65	3						
02/07/73	5050	57.29	9.2	54 F	7.7	1650	100	53	280	--	0	213	--	332	11.0	2.70	--		468		X
0940	5050		86	12 C	8.0	2180	4.99	4.36	12.18		.00	3.49		9.36	.18		--		293	5.6	
							23	20	57			27		72	1						
02/22/73	5050	64.44	9.6	59 F	7.4	300	25	7.4	43	2.1	0	80	54	47	3.7	.20	--	243	92		X
1230	5050		95	15 C	7.8	424	1.25	.61	1.87	.05	.00	1.31	1.12	1.33	.06		--	222	28	1.9	
							33	16	49	1		34	29	35	2						
07/19/73	5050	55.40	8.9	74 F	8.0	1200	--	--	--	--	0	187	--	--	--	--	--		290		
0800	5050		104	23 C	7.8	1440					.00	3.06					--				
08/15/73	5050			79 F	7.7	1500	58	34	170	5.1	0	170	127	263	10.0	.40	--	811	287		
1015	5050			26 C	8.0	1420	2.89	2.80	7.40	.13	.00	2.79	2.64	7.42	.16		--	751	145	4.4	
							22	21	56	1		21	20	57	1						
09/24/73	5050	56.26	9.2	67 F	8.0	700	39	21	96	3.4	0	162	76	124	4.6	.20	--	478	185		
0920	5050		100	19 C	8.3	844	1.95	1.73	4.18	.09	.00	2.66	1.58	3.50	.07		--	444	51	3.1	
							25	22	53	1		34	20	45	1						
80	7710.00				SAN JOAQUIN RIVER NEAR MENDOTA																
01/24/73	5050		11.8	50 F	8.4	330	26	14	52	--	0	106	--	53	1.3	.20	--		122		X
1720	5050		105	10 C	7.8	497	1.30	1.15	2.26		.00	1.74		1.49	.02		--		36	2.0	
							28	24	48			54		46	1						
07/17/73	5050	4.12	9.4	72 F	7.9	350	--	--	--	--	1.0	85	--	--	--	--	--		111		X
0700	5050		108	22 C	8.3	533					.03	1.39					--				
09/24/73	5050	3.69	9.6	60 F	7.6	300	17	11	34	2.0	0	93	26	43	2.4	.10	--	203	88		
0720	5050		96	16 C	8.2	361	.85	.90	1.48	.05	.00	1.52	.54	1.21	.04		--	181	12	1.6	
							26	27	45	2		46	16	37	1						
80	7885.00				SAN JOAQUIN RIVER AT FRIANT DAM																
07/25/73	5050	2.39	15.5	58 F	7.4		--	--	--	--	0	17	--	--	--	--	--		12		
1045	5050		153	14 C	7.7	41					.00	.28					--				
80	8415.30				LOS BANOS CREEK AT HIGHWAY 152																
02/15/73	5050						38	22	47	--	0	157	--	30	2.6	.50	--		186		
1530	5050				7.4	598	1.90	1.81	2.04		.00	2.57		.85	.04		--		57	1.5	
							33	31	35			74		25	1						

TABLE D-2 (Cont'd)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. D DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: B	F SIO2	TDS SUM	TH NCH	TURB SAR	REM
	B0	8626.00			GARZAS CREEK AT HIGHWAY 33																
02/15/73	5050						41	21	38	--	0	195	--	21	3.2	.30	--		188		
1600	5050				8.9	533	2.05	1.73	1.65		.00	3.20		.59	.05		--		29	1.2	
							38	32	30			83		15	1						
	B0	8735.00			ORESTIMBA CREEK AT HIGHWAY 33																
02/16/73	5050						38	22	21	--	0	181	--	8.9	1.9	.10	--		185		
0800	5050				7.7	430	1.90	1.81	.91		.00	2.97		.25	.03		--		37	0.7	
							41	39	20			91		8	1						
	B0	8826.50			DEL PUERTO CREEK AT HIGHWAY 33																
02/16/73	5050						30	60	30	--	0	333	--	13	5.4	.30	--		323		
0845	5050				8.0	681	1.50	4.93	1.31		.00	5.46		.37	.09		--		49	0.7	
							19	64	17			92		6	2						
	B0	9450.01			CORRAL HOLLOW CREEK AT HIGHWAY 5																
02/16/73	5050						59	26	80	--	0	238	--	43	7.0	1.60	--		256		
1030	5050				8.1	824	2.94	2.14	3.48		.00	3.90		1.21	.11		--		59	2.2	
							34	25	41			75		23	2						
	B0	9655.01			LONE TREE CREEK AT HIGHWAY 5																
02/16/73	5050						87	44	134	--	0	342	--	94	15.0	3.10	--		397		
1015	5050				7.8	1310	4.34	3.62	5.83		.00	5.61		2.65	.24		--		118	2.9	
							31	26	42			66		31	3						
	B3	1158.10			STANISLAUS RIVER BELOW TULLOCH DAM																
07/26/73	5050		13.0	78 F	8.2		--	--	--	--	0	34	--	--	--	--	--		26		
1100	5050		159	26 C	7.9	69					.00	.56					--				
09/25/73	5050		7.0	65 F	8.0	110	12	5.1	7.4	1.1	0	64	6.7	3.3	.6	.00	--	91	51		
0800	5050		75	18 C	7.9	134	.60	.42	.32	.03	.00	1.05	.14	.09	.01		--	68	0	0.5	T
							44	31	23	2		81	11	7	1						S
	B5	1200.00			MERCED RIVER BELOW EXCHEQUER DAM																
07/25/73	5050		11.5	53 F	6.8		--	--	--	--	0	19	--	--	--	--	--		17		
1445	5050		107	12 C	7.7	45					.00	.31					--				
09/25/73	5050		10.6	55 F	6.8	22	3.6	.5	1.6	.6	0	14	1.8	.5	.6	.00	--	28	11		EA
1030	5050		101	13 C	7.6	32	.18	.04	.07	.02	.00	.23	.04	.01	.01		--	16	0	0.2	T
							58	13	23	6		79	14	3	3						S
	B5	1320.00			MERCED RIVER AT BAGBY																
10/05/72	5050						9.0	.7	3.9	.8	0	30	2.0	4.7	.0	.00	--	50	26		
1400	5050				6.8	74	.45	.06	.17	.02	.00	.49	.04	.13	.00		--	36	1	0.3	T
							64	9	24	3		74	6	20							S
02/21/73	5050						7.5	1.8	3.2	.4	0	30	6.1	3.0	.3	.00	--	47	26		
	5050				7.1	71	.37	.15	.14	.01	.00	.49	.13	.08	.00		--	37	2	0.3	T
							55	22	21	1		70	19	11							
	B5	1410.10			MERCED RIVER ABOVE BRICEBURG																
10/05/72	5050						5.7	1.1	3.9	.9	0	22	1.5	5.0	.2	.00	--	44	19		E
1130	5050				6.6	61	.28	.09	.17	.02	.00	.36	.03	.14	.00		--	29	1	0.4	T
							50	16	30	4		68	6	26							S
02/21/73	5050						5.6	1.0	2.8	.2	0	22	3.6	3.0	.2	.00	--	37	18		E
	5050				7.1	51	.28	.08	.12	.01	.00	.36	.07	.08	.00		--	27	0	0.3	T
							57	16	24	2		71	14	16							
	B5	1517.10			MERCED RIVER BELOW EL PORTAL																
10/05/72	5050						4.2	.6	3.2	.9	0	18	1.0	3.0	.7	.00	--	36	13		E
1100	5050				6.6	45	.21	.05	.14	.02	.00	.30	.02	.08	.01		--	22	0	0.4	T
							50	12	33	5		73	5	20	2						
02/21/73	5050						4.0	.7	2.5	.2	0	16	2.3	3.3	.2	.00	--	25	13		
	5050				7.0	38	.20	.06	.11	.01	.00	.26	.05	.09	.00		--	21	0	0.3	
							53	16	29	3		65	13	23							
07/03/73	5000			64.4F	6.6	14	1.5	.1	1.0	.4	0	9	1.6	.8	--	--	--	29	4		E
1400	5000			18.0C	7.3	14	.07	.01	.04	.01	.00	.15	.03	.02			5.9	16	0	0.2	T
							54	8	31	8		75	15	10							
07/04/73	5000		9.1	62.6F			2.7	.2	.4	.4	0	14	1.5	.7	--	--	--	26	8		E
1030	5000		100	17.0C	7.0	14	.13	.02	.02	.01	.00	.23	.03	.02			5.9	19	0	0.1	T
							72	11	11	6		82	11	7							
07/05/73	5000			62.6F			1.7	.2	1.2	.4	0	10	2.0	.7	--	--	--	24	5		E
0900	5000			17.0C	7.2	14	.08	.02	.05	.01	.00	.16	.04	.02			5.8	17	0	0.2	T
							50	13	31	6		73	18	9							
	B5	1519.50			MERCED RIVER AT JUNCTION BIG OAK FLAT RD AND HWY 140																
02/21/73	5050						2.4	.7	2.2	.0	0	12	.8	2.9	.2	.00	--	21	9		E
	5050				6.6	29	.12	.06	.10	.00	.00	.20	.02	.08	.00		--	15	0	0.3	T
							43	21	36			67	7	27							S
	B5	1540.10			MERCED RIVER AT EL CAPITAN BRIDGE																
10/05/72	5050						4.0	.5	3.2	.9	0	14	.8	5.4	1.2	.00	--	33	12		E
1000	5050				7.0	41	.20	.04	.14	.02	.00	.23	.02	.15	.02		--	23	1	0.4	T
							50	10	35	5		55	5	36	5						
07/03/73	5000			59.0F	6.6	11	1.4	.2	.1	.3	0	7	1.3	.7	--	--	--	18	4		E
1500	5000			15.0C	6.7	11	.07	.02	.00	.01	.00	.11	.03	.02			4.6	12	0	0.0	T
							70	20		10		69	19	13							
07/04/73	5000			54.5F			3.3	.2	.2	.3	0	13	1.6	.7	--	--	--	18	9		E
0935	5000			12.5C	6.7	11	.16	.02	.01	.01	.00	.21	.03	.02			4.8	17	0	0.0	
							80	10	5	5		81	12	8							

TABLE D-2 (Cont'd)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	TURB SAR	REM
	85	1540.10					MERCED RIVER AT EL CAPITAN BRIDGE								CONTINUED							
07/05/73	5000			57.2F				1.4	.1	1.0	.3	0	7	1.3	.8	--	--	--	23	4		E
0815	5000	598		14.0C	6.6	11		.07	.01	.04	.01	.00	.11	.03	.02			4.8	13	0	0.2	T
								54	8	31	8		69	19	13							
	85	1700.00					MERCED RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE															
10/05/72	5050							.4	1.9	1.7	.2	0	6	.3	1.5	.3	.00	--	18	7		E
0830	5050				6.5	25		.02	.16	.07	.01	.00	.10	.01	.13	.00		--	12	4	0.2	T
								8	62	27	4		42	4	54							S
02/21/73	5050			33.8F				1.7	1.7	2.2	.0	0	11	1.3	5.0	.1	.00	--	25	11		E
	5050	150		1.0C	6.5	28		.08	.14	.10	.00	.00	.18	.03	.14	.00		--	17	2	0.3	T
								25	44	31			51	9	40							S
07/03/73	5000			59.9F	6.5	9		.9	.1	.6	.2	0	6	1.5	.3	--	--	--	19	3		E
1630	5000	468		15.5C	6.7	8		.04	.01	.03	.01	.00	.10	.03	.01			.9	7	0	0.2	T
								44	11	33	11		71	21	7							
07/04/73	5000		9.5	52.7F	6.0	9		1.6	.1	.1	.2	0	6	1.6	.3	--	--	--	21	4		E
0840	5000	470	100	11.5C	6.9	8		.08	.01	.00	.01	.00	.10	.03	.01			3.9	11	0	0.0	T
								80	10		10		71	21	7							
07/05/73	5000			55.4F				1.1	.1	.7	.2	0	11	.9	.5	--	--	--	21	3		E
0745	5000			13.0C	7.1	8		.05	.01	.03	.01	.00	.18	.02	.01			3.8	13	0	0.2	T
								50	10	30	10		86	10	5							
	85	4100.00					MERCED RIVER SOUTH FORK NEAR EL PORTAL															
07/03/73	5000			68.9F	6.6	17		3.1	.4	1.4	.5	0	16	2.0	1.4	--	--	--	31	9		EX
1240	5000			20.5C	7.3	28		.15	.03	.06	.01	.00	.26	.04	.04			9.7	26	0	0.2	
								60	12	24	4		76	12	12							
07/04/73	5000			67.1F				3.8	.4	2.0	.5	0	20	1.8	1.5	--	--	--	41	11		E
1100	5000	123		19.5C	7.6	37		.19	.03	.09	.01	.00	.33	.04	.04			10.0	30	0	0.3	T
								59	9	28	3		80	10	10							
07/05/73	5000			67.1F				4.2	.4	2.3	.6	0	17	2.1	1.6	--	--	--	33	12		E
0925	5000			19.5C	7.6	31		.21	.03	.10	.02	.00	.28	.04	.05			11.0	31	0	0.3	
								58	8	28	6		76	11	14							
	86	7150.00					FRESNO RIVER NR DAULTON															
07/25/73	5050		3.1	83 F	6.8			--	--	--	--	0	51	--	--	--	--	--		41		
1245	5050		40	28 C	7.8	164						.00	.84					--				
	CO	1140.00					KINGS RIVER BELOW PEOPLES WEIR															
07/24/73	5050		11.9	61 F	7.0	50		--	--	--	--	0	16	--	--	--	--	--		12		X
0645	5050		121	16 C	7.8	39						.00	.26					--				
09/25/73	5050	5.97	10.9	67 F	7.2	40		--	--	--	--	--	--	--	--	--	--	--				
1245	5050		119	19 C		48												--				
	CO	1349.50					CALIENTE CREEK AT NEUNAKEL ROAD															
02/14/73	5050							86	15	69	--	0	352	--	41	.2	.60	--		276		
1005	5050				7.0	939		4.29	1.23	3.00		.00	5.77		1.16	.00		--		0	1.8	
								50	14	35			83		17							
	CO	1505.50					FANCHER CREEK AT ASHLAN AVENUE															
02/15/73	5050							14	23	8.7	--	0	163	--	4.2	5.2	.00	--		132		
0930	5050				7.3	288		.70	1.89	.38		.00	2.67		.12	.08		--		0	0.3	
								24	64	13			93		4	3						
	CO	2185.00					KAWEAH RIVER BELOW TERMINUS DAM															
07/24/73	5050		11.5	66 F	6.8	50		--	--	--	--	0	18	--	--	--	--	--		14		X
0815	5050		125	19 C	7.8	36						.00	.30					--				
	CO	2621.50					COTTONWOOD CREEK AT HIGHWAY 65															
02/14/73	5050							24	7.8	17	--	0	116	--	12	5.8	.00	--		93		
1500	5050				7.1	260		1.20	.64	.74		.00	1.90		.34	.09		--		0	0.8	
								47	25	29			82		15	4						
	CO	2782.00					DRY CREEK NEAR LEMONCOVE															
02/14/73	5050	3.24						17	4.1	9.2	--	0	71	--	3.9	5.3	.10	--		59		
1430	5050				7.1	163		.85	.34	.40		.00	1.16		.11	.09		--		2	0.5	
								53	21	25			85		8	7						
	CO	3196.00					TULE RIVER BELOW SUCCESS DAM															
07/24/73	5050	5.68	11.2	65 F	7.0	125		--	--	--	--	1.0	61	--	--	--	--	--		45		
1000	5050		121	18 C	8.4	116						.03	1.00					--				
	CO	3559.50					DEER CREEK AT HIGHWAY 65															
02/14/73	5050							19	4.5	14	--	0	87	--	5.9	10.0	.00	--		66		
1245	5050				7.4	205		.95	.37	.61		.00	1.43		.17	.16		--		0	0.8	
								49	19	32			81		10	9						
	CO	3650.00					LEWIS CREEK EAST OF LINDSAY															
02/14/73	5050							28	11	28	--	0	142	--	15	12.0	.00	--		116		
1330	5050				7.3	366		1.40	.90	1.22		.00	2.33		.42	.19		--		0	1.1	
								40	26	35			79		14	6						

TABLE D-2 (Cont'd)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD PH	LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR	REM
		CO 4150.00					WHITE RIVER AT HIGHWAY 65														
02/14/73	5050						27	8.4	23	--	0	139	--	16	7.0	.00	--		103		
1215	5050				7.4	312	1.35	.69	1.00		.00	2.28		.45	.11		--		0	1.0	
							44	23	33			80		16	4						
		CO 4452.30					POSO CREEK AT HEAD OF DIVERSION CHANNEL														
02/14/73	5050						27	4.2	42	--	0	109	--	49	4.8	.20	--		86		
1120	5050				7.4	402	1.35	.35	1.83		.00	1.79		1.38	.08		--		0	2.0	
							38	10	52			55		42	2						
		CO 5150.00					KERN RIVER NR BAKERSFIELD														
07/24/73	5050		11.1	68	F 7.4	400	--	--	--	--	0	31	--	--	--	--	--		21		X
1230	5050		123	20	C 7.8	72					.00	.51					--				
		CO 6910.50					EL PASO CREEK AT RANCHO ROAD														
02/14/73	5050						48	14	15	--	0	169	--	6.3	16.0	.10	--		176		
0845	5050				7.6	429	2.40	1.15	.65		.00	2.77		.18	.26		--		39	0.5	
							57	27	15			86		6	8						
		CO 7050.00					ZAPATO CREEK NEAR AVENAL														
02/15/73	5050						64	25	83	--	0	254	--	11	6.4	.30	--		262		
1030	5050				7.9	769	3.19	2.06	3.61		.00	4.16		.31	.10		--		55	2.2	
							36	23	41			91		7	2						
		CO 7060.30					CANOAS CREEK AT HIGHWAY 33														
02/15/73	5050						182	140	220	--	0	293	--	39	19.0	.80	--		1030		
1015	5050				8.0	2190	9.08	11.51	9.57		.00	4.80		1.10	.31		--		790	3.0	
							30	38	32			77		18	5						
		CO 7130.30					AVENAL CREEK AT HIGHWAY 41														
02/15/73	5050						47	36	63	--	0	261	--	21	5.8	.80	--		266		
0900	5050				7.9	776	2.35	2.96	2.74		.00	4.28		.59	.09		--		52	1.7	
							29	37	34			86		12	2						
		CO 7210.30					UNKNOWN TEMBLOR VALLEY DRAINAGE														
02/14/73	5050						54	86	2340	--	0	1410	--	2910	31.0	24.0	--		487		
1430	5050				7.5	10900	2.69	7.07	101.79		.00	23.11		82.06	.50		--		0	46.1	
							2	6	91			22		78							
		CO 7600.00					LOS GATOS CREEK BELOW JACALITOS CREEK NEAR COALINGA														
03/07/73	5050					1180	59	48	136	--	0	246	--	45	6.9	.80	--		344		
0900	5050				7.7	1250	2.94	3.95	5.92		.00	4.03		1.27	.11		--		143	3.2	
							23	31	46			74		23	2						
		CO 7650.50					WARTHAN CREEK NEAR COALINGA														
02/15/73	5050						111	78	279	--	0	217	--	88	4.3	1.80	--		599		
1130	5050				7.6	1930	5.54	6.41	12.14		.00	3.56		2.48	.07		--		420	5.0	
							23	27	50			58		41	1						
		CO 7660.30					LOS GATOS CREEK NEAR COALINGA														
02/15/73	5050						43	91	136	--	0	403	--	38	6.4	.80	--		481		
1200	5050				8.0	1400	2.15	7.48	5.92		.00	6.61		1.07	.10		--		151	2.7	
							14	48	38			85		14	1						
		CO 7670.30					JACALITOS CREEK AT JAYNE AVENUE														
02/15/73	5050						73	42	114	--	0	216	--	39	4.1	.60	--		357		
1100	5050				7.7	1180	3.64	3.45	4.96		.00	3.54		1.10	.07		--		178	2.6	
							30	29	41			75		23	1						
		CO 7700.30					MEDIA AGUA CREEK AT HIGHWAY 33														
02/14/73	5050						34	4.4	96	--	0	209	--	38	4.1	.60	--		103		
1600	5050				7.4	628	1.70	.36	4.18		.00	3.43		1.07	.07		--		0	4.1	
							27	6	67			75		23	2						
		CO 7710.30					UNKNOWN CREEK AT HIGHWAY 33 NEAR TEMBLOR PUMPING STA														
02/15/73	5050						519	79	296	--	0	268	--	110	2.9	1.60	--		1620		
0800	5050				6.7	3500	25.90	6.50	12.88		.00	4.39		3.10	.05		--		1402	3.2	
							57	14	28			58		41	1						
		CO 7720.30					UNKNOWN CREEK AT HIGHWAY 33 1.2 MI SOUTH OF LERDO RD														
02/14/73	5050						94	8.5	158	--	0	121	--	226	7.0	.40	--		270		
1530	5050				7.1	1340	4.69	.70	6.87		.00	1.98		6.37	.11		--		171	4.2	
							38	6	56			23		75	1						
		CO 8012.30					PLEITITO CREEK 3.6 MILES SOUTH OF HIGHWAY 166														
02/14/73	5050						523	212	1170	--	0	244	--	922	14.0	3.20	--		2180		
1000	5050				7.3	7760	26.10	17.43	50.90		.00	4.00		26.00	.23		--		1978	10.9	
							28	18	54			13		86	1						
		CI 1120.00					MILL CREEK NEAR PIEDRA														
04/18/73	5050						20	6.6	14	--	0	104	--	7.9	2.4	--	--		77		
1330	5050				7.8	211	1.00	.54	.61		.00	1.70		.22	.04		--		0	0.7	
							47	25	28			87		11	2						

TABLE D-2 (Cont'd)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	TURB SAR	REM
	C1	1140.00			KINGS RIVER BELOW PINE FLAT RESERVOIR																
07/25/73	5050	7.47	14.0	64 F	7.0		--	--	--	--	0	12	--	--	--	--	--		10		
0845	5050		149	18 C	7.6	29					.00	.20					--				
	C1	3550.30			MILL CREEK ABOVE SQUAW VALLEY																
04/16/73	5050			69 F	8.0	180	16	4.4	12	--	0	85	--	5.7	2.7	--	--		58		
1550	5050			21 C	7.7	172	.80	.36	.52		.00	1.39		.16	.04		--		0	0.7	
							48	21	31			87		10	3						
	C1	3580.30			SQUAW CREEK AT USFS FIRE CONTROL STATION																
04/17/73	5050			73 F	8.2	425	41	18	21	--	0	228	--	11	3.9	--	--		178		
1330	5050			23 C	8.1	423	2.05	1.48	.91		.00	3.74		.31	.06		--		0	0.7	
							46	33	20			91		8	1						
	C1	5130.50			DOG CREEK AT HIGHWAY 168 ABOVE ACADEMY																
02/15/73	5050						15	6.3	4.2	--	0	78	--	.0	2.0	.00	--		63		
0845	5050				7.3	138	.75	.52	.18		.00	1.28		.00	.03		--		0	0.2	
							52	36	12			98			2						
	C1	5154.50			DRY CREEK AT HIGHWAY 168 BELOW MILLERTON ROAD																
02/15/73	5050						40	23	23	--	0	168	--	15	5.1	.10	--		194		
0900	5050				7.5	494	2.00	1.89	1.00		.00	2.75		.42	.08		--		57	0.7	
							41	39	20			85		13	2						
	C2	5100.00			SAND CREEK NEAR ORANGE COVE																
04/16/73	5050				8.1	500	40	18	31	--	0	229	--	29	5.9	--	--		176		
1345	5050				8.0	501	2.00	1.48	1.35		.00	3.75		.82	.10		--		0	1.0	
							41	31	28			80		18	2						
	C2	5102.50			SAND CREEK AT ROAD 128 ABOVE ORANGE COVE																
02/14/73	5050						30	9.7	20	--	0	134	--	17	11.0	.00	--		117		
1530	5050				7.6	310	1.50	.80	.87		.00	2.20		.48	.18		--		5	0.8	
							47	25	27			77		17	6						
	C2	8170.00			YOKOHL CREEK AT FRIANT KERN CANAL XING NR EXETER																
02/14/73	5050						20	4.4	12	--	0	86	--	7.3	4.6	.10	--		67		
1340	5050				7.2	198	1.00	.36	.52		.00	1.41		.21	.07		--		0	0.6	
							53	19	28			83		12	4						
	C4	4050.30			LITTLE CREEK AT HIGHWAY 65 BRIDGE																
02/14/73	5050						22	1.1	213	--	0	172	--	157	2.1	.80	--		60		
1135	5050				7.7	1200	1.11	.09	9.27		.00	2.82		4.43	.03		--		0	12.0	
							11	1	89			39		61							
	C6	1545.10			BRITE CREEK AT BANDUCCI ROAD																
05/07/73	5647			47 F			71	18	22	2.3	0	292	49	9.4	1.9	.00	--	309	253		
1015	5050			8 C	8.0	573	3.54	1.48	.96	.06	.00	4.79	1.02	.27	.03		--	317	12	0.6	
							59	25	16	1		78	17	4							
	C6	7010.10			CUMMINGS CREEK AT BANDUCCI ROAD																
05/07/73	5647			63 F			49	16	23	3.4	0	250	16	12	6.0	.00	--	248	187		
1500	5050			17 C	8.0	473	2.45	1.32	1.00	.09	.00	4.10	.33	.34	.10		--	248	0	0.7	
							50	27	21	2		84	7	7	2						
	C6	9550.30			BITTER CREEK AT HIGHWAY 33																
02/14/73	5050						467	589	1120	--	0	372	--	105	22.0	.40	--		3590		
1200	5050				7.7	8320	23.30	48.44	48.72		.00	6.10		2.96	.35		--		3285	8.1	
							19	40	40			65		31	4						
	C6	9560.30			SANTIAGO CREEK AT HIGHWAY 33																
02/14/73	5050						470	108	629	--	0	224	--	98	1.3	2.00	--		1620		
1140	5050				7.1	4780	23.45	8.88	27.36		.00	3.67		2.76	.02		--		1434	6.8	
							39	15	46			57		43							
	C7	1818.50			BITTERWATER CREEK 3.5 MILES EAST OF BITTERWATER P.S.																
02/14/73	5050						591	81	547	--	0	283	--	235	.9	2.20	--		1810		
1700	5050				6.8	4250	29.49	6.66	23.79		.00	4.64		6.63	.01		--		1577	5.6	
							49	11	40			41		59							
	C7	7047.30			CANTUA CREEK ABOVE HIGHWAY 33																
02/15/73	5050						40	113	89	--	0	496	--	19	3.1	.60	--		566		
1300	5050				8.0	1290	2.00	9.29	3.87		.00	8.13		.54	.05		--		158	1.6	
							13	61	26			93		6	1						

TABLE D-3

MINOR ELEMENT ANALYSES OF SURFACE WATER

Table D-3 presents minor element analyses performed by the Department of Water Resources' laboratory and the U. S. Geological Survey's laboratory.

The sampler and laboratory codes are as follows:

5000 U. S. Geological Survey

5050 Department of Water Resources

Values followed by "D" represent dissolved concentrations. All others represent total concentrations.

TABLE D-3

MINOR ELEMENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
	B0	4175.00		TUOLUMNE RIVER AT LA GRANGE BRIDGE								
09/25/73	5050			67 F		--	0.00 T	0.00 T	0.01 T	--	--	
0920	5050		44	6.8	0.00 D	--	--	0.18 T	--	--	--	
	B0	5131.00		MERCED RIVER AT MILLIKEN BRIDGE								
09/24/73	5050			68 F		--	0.01 T	0.00 T	0.00 T	--	--	
1000	5050		110	8.2	--	--	--	--	--	--	--	
	B0	7020.00		SAN JOAQUIN RIVER NEAR VERNALIS								
10/19/72	5050			16.5C		--	--	--	--	--	--	
0700	5000		325	7.4	--	--	--	0.030 D	--	--	--	
11/15/72	5050			12 C		--	--	--	--	--	--	
0830	5000		550	7.4	--	--	--	0.050 D	--	--	--	
12/14/72	5050			5.0C		--	--	--	--	--	--	
0830	5000		440	7.4	--	--	--	0.020 D	--	--	--	
01/24/73	5050			8 C		--	--	--	--	--	--	
1035	5000		420	7.4	--	--	--	0.060 D	--	--	--	
02/23/73	5050			12 C		--	--	--	--	--	--	
0750	5000		800	7.4	--	--	--	0.070 D	--	--	--	
04/18/73	5050			15.0C		--	--	--	--	--	--	
0915	5000		500	7.4	--	--	--	0.040 D	--	--	--	
05/17/73	5050			23 C		--	--	--	--	--	--	
0730	5000		700	7.6	--	--	--	0.009 D	--	--	--	
06/15/73	5050			18.0C		--	--	--	--	--	--	
0700	5000		450	7.6	--	--	--	0.070 D	--	--	--	
07/19/73	5050			21 C		--	--	--	--	--	--	
0715	5000		900	8.1	--	--	--	0.020 D	--	--	--	
08/16/73	5050			25.0C		--	--	--	--	--	--	
0830	5000		820	7.7	--	--	--	0.020 D	--	--	--	
	B0	7080.00		SAN JOAQUIN RIVER NEAR GRAYSON								
09/24/73	5050			68 F		--	0.00 T	0.01 T	0.06 T	--	--	
1130	5050		800	7.9	0.00 D	--	--	1.8 T	--	--	--	
	B0	7375.00		SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE								
09/24/73	5050			67 F		--	0.00 T	0.02 T	0.00 T	--	--	
0920	5050		700	8.0	0.00 D	--	--	5.4 T	--	--	--	
	B0	7710.00		SAN JOAQUIN RIVER NEAR MENDOTA								
09/24/73	5050			60 F		--	0.00 T	0.01 T	0.00 T	--	--	
0720	5050		300	7.6	0.00 D	--	--	2.5 T	--	--	--	
	B3	1158.10		STANISLAUS RIVER BELOW TULLOCH DAM								
09/25/73	5050			65 F		--	0.00 T	0.01 T	0.02 T	--	--	
0800	5050		110	8.0	0.00 D	--	--	0.02 T	--	--	--	
	B5	1200.00		MERCED RIVER BELOW EXCHEQUER DAM								
09/25/73	5050			55 F		--	0.00 T	0.00 T	0.01 T	--	--	
1030	5050		22	6.8	0.00 D	--	--	0.14 T	--	--	--	
	B5	1517.10		MERCED RIVER BELOW EL PORTAL								
07/03/73	5000			18.0C		--	0.000 D	--	0.002 D	0.0000 D	--	
1400	5000		14	6.6	0.000 D	0.000 D	--	0.050 D	--	--	0.000 D	
07/04/73	5000			17.0C		--	0.000 D	--	0.002 D	0.0000 D	--	
1030	5000				0.006 D	0.000 D	--	0.050 D	--	--	0.000 D	
07/05/73	5000			17.0C		--	0.000 D	--	0.001 D	0.0000 D	--	
0900	5000				0.000 D	0.000 D	--	0.040 D	--	--	0.000 D	
	B5	1540.10		MERCED RIVER AT EL CAPITAN BRIDGE								
07/03/73	5000			15.0C		--	0.000 D	--	0.000 D	0.0001 D	--	
1500	5000		11	6.6	0.000 D	0.000 D	--	0.050 D	--	--	0.010 D	
07/04/73	5000			12.5C		--	0.000 D	--	0.002 D	0.0001 D	--	
0935	5000				0.000 D	0.001 D	--	0.040 D	--	--	0.000 D	
07/05/73	5000		598	14.0C		--	0.000 D	--	0.000 D	0.0000 D	--	
0815	5000				0.000 D	0.001 D	--	0.030 D	--	--	0.000 D	
	B5	1700.00		MERCED RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE								
07/03/73	5000		468	15.5C		--	0.000 D	--	0.002 D	0.0001 D	--	
1630	5000		9	6.5	0.001 D	0.001 D	--	0.050 D	--	--	0.030 D	
07/04/73	5000		470	11.5C		--	0.000 D	--	0.001 D	0.0001 D	--	
0840	5000		9	6.0	0.000 D	0.000 D	--	0.030 D	--	--	0.020 D	
07/05/73	5000			13.0C		--	0.000 D	--	--	0.0001 D	--	
0745	5000				0.000 D	0.000 D	--	0.020 D	--	--	0.000 D	
	B5	4100.00		MERCED RIVER SOUTH FORK NEAR EL PORTAL								
07/03/73	5000			20.5C		--	0.000 D	--	0.003 D	0.0001 D	--	
1240	5000		17	6.6	0.000 D	0.001 D	--	0.010 D	--	--	0.000 D	
07/04/73	5000		123	19.5C		--	0.000 D	--	0.003 D	0.0000 D	--	
1100	5000				0.000 D	0.000 D	--	0.010 D	--	--	0.000 D	
07/05/73	5000			19.5C		--	0.000 D	--	0.003 D	0.0001 D	--	
0925	5000				0.000 D	0.000 D	--	0.010 D	--	--	0.000 D	

TABLE D-3 (Cont'd)

MINOR ELEMENT ANALYSIS OF SURFACE WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
	CO		1140.00	KINGS RIVER BELOW PEDPLES WEIR								
09/25/73	SOSO			67 F		--	0.00 T	0.01 T	0.00 T	--	--	
1245	SOSO		40	7.2	0.00 O	--	--	--	--	--	--	

TABLE D-4

SUPPLEMENTAL MINOR ELEMENT ANALYSES OF SURFACE WATER

Table D-4 presents supplemental minor element analyses performed by the Department of Water Resources' laboratory and the U. S. Geological Survey's laboratory.

The sampler and laboratory codes are as follows:

5000 U. S. Geological Survey

5050 Department of Water Resources

Values followed by "D" represent dissolved concentrations. All others represent total concentrations.

TABLE D-4

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	CONSTITUENTS IN MILLIGRAMS PER LITER ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
		80	4175.00		TUOLUMNE RIVER AT LA GRANGE BRIDGE							
09/25/73	5050			67 F		--	--	--	--	--	--	
0920	5050		44	6.8	0.0 T	--	--	--	--	--	--	
		80	7020.00		SAN JOAQUIN RIVER NEAR VERNALIS							
10/19/72	5050			16.5C		--	--	--	0.010 D	--	--	
0700	5000		325	7.4	--	--	--	--	--	0.320 D	--	
11/15/72	5050			12 C		--	--	--	0.000 D	--	--	
0830	5000		550	7.4	--	--	--	--	--	0.440 D	--	
12/14/72	5050			5.0C		--	--	--	0.000 D	--	--	
0830	5000		440	7.4	--	--	--	--	--	0.430 D	--	
01/24/73	5050			8 C		--	--	--	0.000 D	--	--	
1035	5000		420	7.4	--	--	--	--	--	0.330 D	--	
02/23/73	5050			12 C		--	--	--	0.000 D	--	--	
0750	5000		800	7.4	--	--	--	--	--	0.250 D	--	
04/18/73	5050			15.0C		--	--	--	0.000 D	--	--	
0915	5000		500	7.4	--	--	--	--	--	0.350 D	--	
05/17/73	5050			23 C		--	--	--	0.010 D	--	--	
0730	5000		700	7.6	--	--	--	--	--	0.400 D	--	
06/15/73	5050			18.0C		--	--	--	0.000 D	--	--	
0700	5000		450	7.6	--	--	--	--	--	0.350 D	--	
07/19/73	5050			21 C		--	--	--	0.010 D	--	--	
0715	5000		900	8.1	--	--	--	--	--	0.650 D	--	
08/16/73	5050			25.0C		--	--	--	0.010 D	--	--	
0830	5000		820	7.7	--	--	--	--	--	0.540 D	--	
		80	7080.00		SAN JOAQUIN RIVER NEAR GRAYSON							
09/24/73	5050			68.0F		--	--	--	--	--	--	
1130	5050		800	7.9	1.3 T	--	--	--	--	--	--	
		80	7375.00		SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE							
09/24/73	5050			67.0F		--	--	--	--	--	--	
0920	5050		700	8.0	1.3 T	--	--	--	--	--	--	
		80	7710.00		SAN JOAQUIN RIVER NEAR MENDOTA							
09/24/73	5050			60.0F		--	--	--	--	--	--	
0720	5050		300	7.6	1.0 T	--	--	--	--	--	--	
		83	1158.10		STANISLAUS RIVER BELOW TULLOCH DAM							
09/25/73	5050			65 F		--	--	--	--	--	--	
0800	5050		110	8.0	0.0 T	--	--	--	--	--	--	
		85	1200.00		MERCED RIVER BELOW EXCHEQUER DAM							
09/25/73	5050			55 F		--	--	--	--	--	--	
1030	5050		22	6.8	0.0 T	--	--	--	--	--	--	
		85	1517.10		MERCED RIVER BELOW EL PORTAL							
07/03/73	5000			18.0C		--	--	--	--	--	--	
1400	5000		14	6.6	--	--	0.001 D	--	--	--	--	
07/04/73	5000			17.0C		--	--	--	--	--	--	
1030	5000				--	--	0.001 D	--	--	--	--	
07/05/73	5000			17.0C		--	--	--	--	--	--	
0900	5000				--	--	0.001 D	--	--	--	--	
		85	1540.10		MERCED RIVER AT EL CAPITAN BRIDGE							
07/03/73	5000			15.0C		--	--	--	--	--	--	
1500	5000		11	6.6	--	--	0.001 D	--	--	--	--	
07/04/73	5000			12.5C		--	--	--	--	--	--	
0935	5000				--	--	0.000 D	--	--	--	--	
07/05/73	5000		598	14.0C		--	--	--	--	--	--	
0815	5000				--	--	0.002 D	--	--	--	--	
		85	1700.00		MERCED RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE							
07/03/73	5000		468	15.5C		--	--	--	--	--	--	
1630	5000		9	6.5	--	--	0.000 D	--	--	--	--	
07/04/73	5000		470	11.5C		--	--	--	--	--	--	
0840	5000		9	6.0	--	--	0.000 D	--	--	--	--	
07/05/73	5000			13.0C		--	--	--	--	--	--	
0745	5000				--	--	0.000 D	--	--	--	--	
		85	4100.00		MERCED RIVER SOUTH FORK NEAR EL PORTAL							
07/03/73	5000			20.5C		--	--	--	--	--	--	
1240	5000		17	6.6	--	--	0.001 D	--	--	--	--	
07/04/73	5000		123	19.5C		--	--	--	--	--	--	
1100	5000				--	--	0.001 D	--	--	--	--	
07/05/73	5000			19.5C		--	--	--	--	--	--	
0925	5000				--	--	0.001 D	--	--	--	--	

TABLE D-5

MISCELLANEOUS CONSTITUENTS OF SURFACE WATER

Table D-5 presents data not included in Tables D-2, D-3, D-4, D-6, and D-7. Definitions of abbreviations used in this table are as follows:

Abbreviations

BOD	Biochemical Oxygen Demand (B = 5 day at 20° C)
COD	Chemical Oxygen Demand
SUSS	Suspended Solids at (S = 105° C)
VSUSS	Volatile
TOC	Total Organic Carbon
LAB	Laboratory
	5000 U. S. Geological Survey
	5050 Department of Water Resources

TABLE D-5

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.N.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET 5 ML/L MG/L	BOD 5US 5	COD V 5US 5	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
	80	0470.00			SALT SLOUGH NR STEVINSON												
07/19/73 0720	5050 5050	70 1000	F 7.6 21.08	7.6	--		-- --	-- --	-- --	-- 132 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	3115.00			STANISLAUS RIVER AT KOETITZ RANCH												
07/19/73 1230	5050 5050	76 190	F 11.8 28.20	7.8	--		-- --	-- --	-- --	-- 16 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	3185.00			STANISLAUS RIVER AT KNIGHTS FERRY												
07/26/73 1300	5050 5050	78.0	F 10.2		--		-- --	-- --	-- --	-- 2 5	-- 2	-- --	-- --	-- --	-- --	-- --	-- --
	80	4105.00			TUOLUMNE RIVER AT TUOLUMNE CITY												
07/19/73 1200	5050 5050	75 700	F 11.4 23.01	8.2	--		-- --	-- --	-- --	-- 17 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	4150.00			TUOLUMNE RIVER AT HICKMAN BRIDGE NR WATERFORD												
07/26/73 0715	5050 5050	78	F 10.2 69.88	8.0	--		-- --	-- --	-- --	-- 12 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	4175.00			TUOLUMNE RIVER AT LA GRANGE BRIDGE												
07/26/73 0845	5050 5050	60	F 12.1	7.0	--		-- --	-- --	-- --	-- 1 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	5131.00			MERCED RIVER AT MILLIKEN BRIDGE												
07/19/73 0900	5050 5050	72 150	F 12.2	7.4	--		-- --	-- --	-- --	-- 12 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	7020.00			SAN JOAQUIN RIVER NEAR VERNALIS												
10/19/72 0700	5050 5050	16.5C 325	6.0 10.98	7.4	--		-- --	-- --	-- --	5.2 B --	20 --	-- --	-- --	-- --	-- --	-- --	-- --
11/15/72 0830	5050 5050	12 550	C 8.9 11.52	7.4	--		-- --	-- --	-- --	7.6 B --	28 --	-- --	-- --	-- --	-- --	-- --	-- --
12/14/72 0830	5050 5050	5.0C 440	11.5	7.4	--		-- --	-- --	-- --	3.3 B --	12 --	-- --	-- --	-- --	-- --	-- --	-- --
01/24/73 1035	5050 5050	8 420	C 9.7	7.4	--		-- --	-- --	-- --	3.8 B --	20 --	-- --	-- --	-- --	-- --	-- --	-- --
02/23/73 0750	5050 5050	12 800	C 8.2 18.96	7.4	--		-- --	-- --	-- --	1.9 B --	13 --	-- --	-- --	-- --	-- --	-- --	-- --
04/18/73 0915	5050 5050	15.0C 500	9.9 13.72	7.4	--		-- --	-- --	-- --	3.4 B --	12 --	-- --	-- --	-- --	-- --	-- --	-- --
05/17/73 0730	5050 5050	23 700	C 9.0 11.82	7.6	--		-- --	-- --	-- --	5.1 B --	17 --	-- --	-- --	-- --	-- --	-- --	-- --
06/15/73 0700	5050 5050	18 450	C 9.1 11.64	7.6	--		-- --	-- --	-- --	4.1 B --	30 --	-- --	-- --	-- --	-- --	-- --	-- --
07/19/73 0715	5050 5050	21 900	C 9.4 9.78	8.1	--		-- --	-- --	-- --	6.9 B --	22 --	-- --	-- --	-- --	-- --	-- --	-- --
08/16/73 0830	5050 5050	25 820	C 9.7 10.06	7.7	--		-- --	-- --	-- --	6.5 B --	10 --	-- --	-- --	-- --	-- --	-- --	-- --
09/20/73 0645	5050 5050	71 700	F 7.9 10.73	7.4	--		-- --	-- --	-- --	8.0 B --	27 --	-- --	-- --	-- --	-- --	-- --	-- --
	80	7040.00			SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE												
07/19/73 1320	5050 5050	75 1000	F 12.2 13.62	8.4	--		-- --	-- --	-- --	-- 190 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	7080.00			SAN JOAQUIN RIVER NEAR GRAYSON												
07/19/73 1100	5050 5050	75 1100	F 13.9	8.2	--		-- --	-- --	-- --	-- 100 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	7375.00			SAN JOAQUIN RIVER AT FRENDNT FORD BRIDGE												
07/19/73 0800	5050 5050	74 1200	F 8.9 55.40	8.0	--		-- --	-- --	-- --	-- 460 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	7710.00			SAN JOAQUIN RIVER NEAR MENDOTA												
07/17/73 0700	5050 5050	72 350	F 9.4 4.12	7.9	--		-- --	-- --	-- --	-- 140 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	80	7885.00			SAN JOAQUIN RIVER AT FRIANT DAM												
07/25/73 1045	5050 5050	58	F 15.5 2.39	7.4	--		-- --	-- --	-- --	-- 6 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	83	1158.10			STANISLAUS RIVER BELOW TULLOCH DAM												
07/26/73 1100	5050 5050	78	F 13.0	8.2	--		-- --	-- --	-- --	-- 4 5	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	83	1400.50			STANISLAUS RIVER AT PARROTTS FERRY BRIDGE												
07/26/73 0940	5050 5050	58	F 11.3		--		-- --	-- --	-- --	-- 3 5	-- 3	-- --	-- --	-- --	-- --	-- --	-- --

TABLE D-5 (Cont'd)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.M.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS S	COD V SUS S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
	B3	2110.10			STANISLAUS RIVER NF AT CALAVERAS BIG TREES STATE PAR												
07/26/73	5050	66.0F	9.3				--	--	--	--	--	--	--	--	--	--	--
1030	5050				--		--	--	--	2 5	2	--	--	--	--	--	--
	B3	3255.00			STANISLAUS RIVER MIDDLE FORK AT BEARDSLEY												
07/26/73	5050	60.0F	9.9				--	--	--	--	--	--	--	--	--	--	--
0640	5050				--		--	--	--	2 5	2	--	--	--	--	--	--
	B3	3480.10			STANISLAUS RIVER MIDDLE FORK AT DARDANELLE												
07/25/73	5050	59.0F	7.7				--	--	--	--	--	--	--	--	--	--	--
1600	5050				--		--	--	--	0 5	0	--	--	--	--	--	--
	B5	1200.00			MERCED RIVER BELOW EXCHEQUER DAM												
07/25/73	5050	53 F	11.5	6.8			--	--	--	--	--	--	--	--	--	--	--
1445	5050				--		--	--	--	1 5	--	--	--	--	--	--	--
	B5	1320.00			MERCED RIVER AT BAGBY												
02/21/73	5050						--	--	--	0.4 B	--	--	--	--	--	--	--
	5050				--		--	--	--	--	--	--	--	--	--	--	--
	B5	1410.10			MERCED RIVER ABOVE BRICEBURG												
02/21/73	5050						--	--	--	0.6 B	--	--	--	--	--	--	--
	5050				--		--	--	--	--	--	--	--	--	--	--	--
07/03/73	5000	17.5C		6.5	864		--	--	--	--	--	--	1.5	--	--	--	--
1200	5000	16			--		--	--	--	--	--	--	--	--	--	--	--
07/04/73	5000	18.0C			796		--	--	--	--	--	--	2.0	--	--	--	--
1125	5000				--		--	--	--	--	--	--	--	--	--	--	--
07/05/73	5000	18.5C			766		--	--	--	--	--	--	1.0	--	--	--	--
1000	5000				--		--	--	--	--	--	--	--	--	--	--	--
	B5	1517.10			MERCED RIVER BELOW EL PORTAL												
02/21/73	5050						--	--	--	1.0 B	--	--	--	--	--	--	--
	5050				--		--	--	--	--	--	--	--	--	--	--	--
07/03/73	5000	18.0C		6.6			--	--	--	--	--	--	3.0	--	--	--	--
1400	5000	14			--		--	--	--	--	--	--	--	--	--	--	--
07/04/73	5000	17.0C	9.1				--	--	--	--	--	--	1.5	--	--	--	--
1030	5000				--		--	--	--	--	--	--	--	--	--	--	--
07/05/73	5000	17.0C					--	--	--	--	--	--	1.0	--	--	--	--
0900	5000				--		--	--	--	--	--	--	--	--	--	--	--
	B5	1519.50			MERCED RIVER AT JUNCTION BIG OAK FLAT RD AND HWY 140												
02/21/73	5050						--	--	--	0.7 B	--	--	--	--	--	--	--
	5050				--		--	--	--	--	--	--	--	--	--	--	--
	B5	1540.10			MERCED RIVER AT EL CAPITAN BRIDGE												
07/03/73	5000	15.0C		6.6			--	--	--	--	--	--	1.0	--	--	--	--
1500	5000	11			--		--	--	--	--	--	--	--	--	--	--	--
07/04/73	5000	12.5C					--	--	--	--	--	--	1.0	--	--	--	--
0935	5000				--		--	--	--	--	--	--	--	--	--	--	--
07/05/73	5000	14.0C			598		--	--	--	--	--	--	1.5	--	--	--	--
0815	5000				--		--	--	--	--	--	--	--	--	--	--	--
	B5	1700.00			MERCED RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE												
02/21/73	5050						--	--	--	0.9 B	--	--	--	--	--	--	--
	5050				--		--	--	--	--	--	--	--	--	--	--	--
07/03/73	5000	15.5C		6.5	468		--	--	--	--	--	--	2.5	--	--	--	--
1630	5000	9			--		--	--	--	--	--	--	--	--	--	--	--
07/04/73	5000	11.5C	9.5	6.0	470		--	--	--	--	--	--	1.5	--	--	--	--
0840	5000	9			--		--	--	--	--	--	--	--	--	--	--	--
07/05/73	5000	13.0C					--	--	--	--	--	--	2.5	--	--	--	--
0745	5000				--		--	--	--	--	--	--	--	--	--	--	--
	B5	4100.00			MERCED RIVER SOUTH FORK NEAR EL PORTAL												
07/03/73	5000	20.5C		6.6			--	--	--	--	--	--	1.5	--	--	--	--
1240	5000	17			--		--	--	--	--	--	--	--	--	--	--	--
07/04/73	5000	19.5C			123		--	--	--	--	--	--	1.5	--	--	--	--
1100	5000				--		--	--	--	--	--	--	--	--	--	--	--
07/05/73	5000	19.5C					--	--	--	--	--	--	1.0	--	--	--	--
0925	5000				--		--	--	--	--	--	--	--	--	--	--	--
	B6	7150.00			FRESNO RIVER NR DAULTON												
07/25/73	5050	83 F	3.1	6.8			--	--	--	--	--	--	--	--	--	--	--
1245	5050				--		--	--	--	7 5	--	--	--	--	--	--	--
	C0	1140.00			KINGS RIVER BELOW PEOPLES WEIR												
07/24/73	5050	61 F	11.9	7.0			--	--	--	--	--	--	--	--	--	--	--
0645	5050	50			--		--	--	--	16 5	--	--	--	--	--	--	--
	C0	2185.00			KAWEAH RIVER BELOW TERMINUS DAM												
07/24/73	5050	66 F	11.5	6.8			--	--	--	--	--	--	--	--	--	--	--
0815	5050	50			--		--	--	--	5 5	--	--	--	--	--	--	--

TABLE D-5 (Cont'd)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SET 5

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MGAS	DEPTH TURB	T.L CHLOR	O.G COLOR	NL/L NG/L	BOD SUS	S	COD V SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF O SULF	CC EXT CA EXT	
		CO 2550.30			KAWEAH RIVER AT LEMONCOVE															
09/26/73 1500	5050 5050	73.0F	10.3	7.3	--	--	--	--	--	4	S	--	--	--	--	--	--	--	--	
		CO 3195.00			TULE RIVER AT WORTH BRIDGE NEAR PORTERVILLE															
09/19/73 1100	5050 5050	77 F	8.6	7.6	--	--	--	--	--	14	S	--	--	--	--	--	--	--	--	
		CO 3196.00			TULE RIVER BELOW SUCCESS DAM															
07/24/73 1000	5050 5050	65 F 125	11.2 5.68	7.0	--	--	--	--	--	8	S	--	--	--	--	--	--	--	--	
		CO 5150.00			KERN RIVER NR BAKERSFIELD															
07/24/73 1230	5050 5050	68 F 400	11.1	7.4	--	--	--	--	--	14	S	--	--	--	--	--	--	--	--	
		CO 5160.10			KERN RIVER AT HART PARK															
09/12/73 1730	5050 5050	75 F	10.7	7.8	--	--	--	--	--	2	S	--	--	--	--	--	--	--	--	
		CO 5180.10			KERN RIVER AT RANCHERIA BRIDGE															
09/12/73 1645	5050 5050	73 F	10.1	7.7	--	--	--	--	--	2	S	--	--	--	--	--	--	--	--	
		CO 7600.00			LOS GATOS CREEK BELOW JACALITOS CREEK NEAR COALINGA															
03/07/73 0900	5050 5050	II80			--	--	--	--	99.9 L --	2080.0	S	--	--	--	--	--	--	--	--	Z
		C1 1140.00			KINGS RIVER BELOW PINE FLAT RESERVOIR															
07/25/73 0845	5050 5050	64 F	14.0 7.47	7.0	--	--	--	--	--	5	S	--	--	--	--	--	--	--	--	
		C2 1210.30			KAWEAH RIVER ABOVE LAKE KAWEAH															
09/26/73 1400	5050 5050	67.0F	10.5	8.0	--	--	--	--	--	2	S	--	--	--	--	--	--	--	--	
		C2 2010.30			KAWEAH RIVER NORTH FORK NEAR MOUTH															
09/26/73 1200	5050 5050	68.0F	10.2	7.9	--	--	--	--	--	9	S	--	--	--	--	--	--	--	--	
		C2 3147.00			KAWEAH RIVER NF BELOW NO 2 INTAKE NR THREE RIVERS															
09/26/73 1100	5050 5050	62.0F	11.0	7.6	--	--	--	--	--	1	S	--	--	--	--	--	--	--	--	
		C2 4201.50			KAWEAH RIVER SOUTH FORK ABOVE GROUSE CREEK															
09/26/73 1300	5050 5050	65.0F	10.3	7.8	--	--	--	--	--	6	S	--	--	--	--	--	--	--	--	
		C3 I929.30			TULE RIVER BELOW SPRINGVILLE															
09/19/73 0915	5050 5050	69 F	10.7	8.2	--	--	--	--	--	44	S	--	--	--	--	--	--	--	--	
		C3 2190.10			TULE RIVER NORTH FORK AT BEAR CREEK ROAD															
09/19/73 0715	5050 5050	65.0F	7.4	7.4	--	--	--	--	--	17	S	--	--	--	--	--	--	--	--	
		C3 3200.00			TULE RIVER SOUTH FORK OF MIDDLE FORK NEAR SPRINGVILL															
09/19/73 0815	5050 5050	64 F	10.1	8.2	--	--	--	--	--	41	S	--	--	--	--	--	--	--	--	
		C3 4149.30			TULE RIVER SOUTH FORK ABOVE CREW CREEK															
09/19/73 1000	5050 5050	71 F	11.0	8.4	--	--	--	--	--	18	S	--	--	--	--	--	--	--	--	
		C5 1220.10			KERN RIVER AT MIRACLE HOT SPRINGS															
09/12/73 1445	5050 5050	71 F	9.2	7.4	--	--	--	--	--	2	S	--	--	--	--	--	--	--	--	
		C5 1500.00			KERN RIVER AT KERNVILLE															
09/12/73 1300	5050 5050	65.0F	12.7	8.0	--	--	--	--	--	2	S	--	--	--	--	--	--	--	--	
		C5 I660.10			KERN RIVER ABOVE FAIRVIEW															
09/12/73 1215	5050 5050	60 F	11.3	7.9	--	--	--	--	--	2	S	--	--	--	--	--	--	--	--	
		C5 3110.10			KERN RIVER SOUTH FORK NEAR WELDON															
09/12/73 1030	5050 5050	66 F	9.8	8.0	--	--	--	--	--	30	S	--	--	--	--	--	--	--	--	

TABLE D-6

Nutrient Constituents of Surface Water

Table D-6 presents analyses which do not appear on Tables D-2, D-3, D-4, D-5, and D-7. Definitions of abbreviations used in this table are as follows:

Abbreviations

EC	Specific Electrical Conductance in Micromhos
TURB	Turbidity in Turbidity Units
HCO_3	Bicarbonate
CO_3	Carbonate
pH	Measurement of Acidity or Alkalinity of Water
NO_2	Nitrite as N
NO_3	Nitrate as N
NH_3	Ammonia as N
OrgN	Organic Nitrogen
NH_3 + OrgN	Ammonia plus Organic Nitrogen as N (total Kjeldahl)
F PO_4	Dissolved Orthophosphate as P
U PO_4	Total Orthophosphate as P
U TOTP	Total Phosphate as P

TABLE D-6

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH		FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F ORG N U ORG N	F (NH3 + U ORG N)	DIS A.M.PO4	F PO4 U PO4	F TOT P U TOT P	REM
	80	0470.00			SALT SLOUGH NR STEVINSON												
07/19/73	5050	21.08	70	F	7.6	1000			160		--	--	.		0.09	--	
0720	5050				8.3	1240			5	--	0.70	--	1.6	--	--	0.36	
	80	3115.00			STANISLAUS RIVER AT KOETITZ RANCH												
07/19/73	5050	28.20	76	F	7.8	190			103		--	--	.		0.06	--	
1230	5050				8.2	211			0	--	0.97	--	0.5	--	--	0.14	
	80	3185.00			STANISLAUS RIVER AT KNIGHTS FERRY												
07/26/73	5050		78.0F								--	--	.		0.01	--	
1300	5050					59				--	0.01	--	0.1	--	--	0.03	
	80	4105.00			TUOLUMNE RIVER AT TUOLUMNE CITY												
07/19/73	5050	23.01	75	F	8.2	700			142		--	--	.		0.11	--	
1200	5050				8.1	707			0	--	0.88	--	1.0	--	--	0.24	
	80	4150.00			TUOLUMNE RIVER AT HICKMAN BRIDGE NR WATERFORD												
07/26/73	5050	69.88	78	F	8.0				99		--	--	.		0.04	--	
0715	5050				8.6	455			4	--	0.19	--	0.4	--	--	0.08	
	80	4175.00			TUOLUMNE RIVER AT LA GRANGE BRIDGE												
07/12/73	5050		66.0F		7.4						0.00	--	.		0.01	--	
1440	5050					54				--	0.11	--	0.2	--	--	0.04	
07/26/73	5050		60	F	7.0						--	--	.		0.00	--	
0845	5050									--	0.09	--	0.2	--	--	0.01	
	80	5131.00			MERCED RIVER AT MILLIKEN BRIDGE												
07/19/73	5050		72	F	7.4	150			70		--	--	.		0.02	--	
0900	5050				8.3	167			1	--	1.1	--	0.4	--	--	0.09	
	80	7020.00			SAN JOAQUIN RIVER NEAR VERNALIS												
10/19/72	5050	10.98	16.5C		7.4	325	20C		129		--	--	.		--	--	
0700	5000				6.9	662		106	0	--	--	--	--	--	--	0.26	
11/15/72	5050	11.52	12	C	7.4	550	50C		146		--	--	.		--	--	
0830	5000				6.6	595		120	0	--	--	--	--	--	--	0.58	
12/14/72	5050		5.0C		7.4	440	7C		118		--	--	.		--	--	
0830	5000				7.3	702		97	0	--	--	--	--	--	--	0.20	
01/24/73	5050		8	C	7.4	420	40C		114		--	--	.		--	--	
1035	5000				7.5	644		94	0	--	--	--	--	--	--	0.30	
02/23/73	5050	18.96	12	C	7.4	800	30C		106		--	--	.		--	--	
0750	5000				7.6	492		87	0	--	--	--	--	--	--	0.27	
04/18/73	5050	13.72	15.0C		7.4	500	30C		117		--	--	.		--	--	
0915	5000				7.5	666		96	0	--	--	--	--	--	--	0.27	
05/17/73	5050	11.82	23	C	7.6	700	30C		139		--	--	.		--	--	
0730	5000				6.9	717		114	0	--	--	--	--	--	--	0.19	
06/15/73	5050	11.84	18.0C		7.6	450	30C		107		--	--	.		--	--	
0700	5000				8.0	566		88	0	--	--	--	--	--	--	0.20	
06/26/73	5000		25.0C		8.3	773	40C		158		--	--	.		--	--	
1030	5000				7.8	799		130	0	--	--	--	1.5	--	--	0.32	
07/19/73	5050	9.78	21	C	8.1	900	40C		184		--	--	.		--	--	
0715	5000				7.5	992		151	0	--	--	--	--	--	--	0.18	
07/25/73	5000		24.0C		8.3		60C		160		--	--	.		--	--	
1030	5000				7.9	836		131	0	--	--	--	1.3	--	--	0.34	
08/16/73	5050	10.06	25.0C		7.7	820	40C		174		--	--	.		--	--	
0830	5000				8.1	902		143	0	--	--	--	--	--	--	0.35	
	80	7040.00			SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE												
07/19/73	5050	13.82	75	F	8.4	1000			184		--	--	.		0.14	--	
1320	5050				8.4	1140			2	--	0.95	--	1.7	--	--	0.42	
	80	7080.00			SAN JOAQUIN RIVER NEAR GRAYSON												
07/19/73	5050		75	F	8.2	1100			189		--	--	.		0.20	--	
1100	5050				8.4	1260			8	--	1.2	--	1.9	--	--	0.51	
	80	7375.00			SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE												
07/19/73	5050	55.40	74	F	8.0	1200			187		--	--	.		0.17	--	
0800	5050				7.8	1440			0	--	0.41	--	2.5	--	--	0.68	
	80	7710.00			SAN JOAQUIN RIVER NEAR MENDOTA												
07/17/73	5050	4.12	72	F	7.9	350			85		--	--	.		0.15	--	
0700	5050				8.3	533			1	--	0.52	--	0.9	--	--	0.44	
	80	7885.00			SAN JOAQUIN RIVER AT FRIANT DAM												
07/25/73	5050	2.39	58	F	7.4				17		--	--	.		0.04	--	
1045	5050				7.7	41			0	--	0.08	--	0.2	--	--	0.06	
08/21/73	5050	2.37	58	F	7.7	35					0.00	--	.		0.04	--	
1350	5050					44				--	0.11	--	0.3	--	--	0.07	
	83	1158.10			STANISLAUS RIVER BELOW TULLOCH DAM												
07/26/73	5050		78	F	8.2						--	--	.		0.00	--	
1100	5050									--	0.01	--	0.2	--	--	0.03	

TABLE D-6 (Cont'd)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U ORG N ORG N	F U (NH3 + ORG N)	DIS A.H.PO4	F U PO4 PO4	F U TOT P TOT P	REM
	B3 1400.50			STANISLAUS RIVER AT PARROTTS FERRY BRIDGE												
07/26/73	5050		58 F							--	--	.		0.01	--	
0940	5050				49				--	0.00	--	0.1	--	--	0.01	
	B3 2110.10			STANISLAUS RIVER NF AT CALAVERAS BIG TREES STATE PAR												
07/26/73	5050		66.0F							--	--	.		0.00	--	
1030	5050				37				--	0.00	--	0.2	--	--	0.00	
	B3 3255.00			STANISLAUS RIVER MIDDLE FORK AT BEARDSLEY												
07/26/73	5050		60.0F							--	--	.		0.01	--	
0640	5050				40				--	0.00	--	0.1	--	--	0.01	
	B3 3480.10			STANISLAUS RIVER MIDDLE FORK AT DARDANELLE												
07/25/73	5050		59.0F							--	--	.		0.00	--	
1600	5050				46				--	0.00	--	0.1	--	--	0.02	
	B4 1290.10			TUOLUMNE RIVER AT WARDS FERRY BRIDGE												
07/12/73	5050		64.0F	7.1						0.00	--	.		0.00	--	
1300	5050				17				--	0.02	--	0.1	--	--	0.00	
	B4 1680.00			TUOLUMNE RIVER ABOVE EARLY INTAKE												
07/12/73	5050		62.0F	7.0						0.00	--	.		0.00	--	
1045	5050				12				--	0.02	--	0.1	--	--	0.00	
	B4 1850.10			TUOLUMNE RIVER AT TUOLUMNE MEADOWS												
07/12/73	5050		44.0F	7.0						0.00	--	.		0.01	--	
0815	5050				11				--	0.01	--	0.0	--	--	0.01	
	B5 1200.00			MERCED RIVER BELOW EXCHEQUER DAM												
07/25/73	5050		53 F	6.8						--	--	.		0.00	--	
1445	5050								--	0.12	--	0.2	--	--	0.01	
	B5 1320.00			MERCED RIVER AT BAGBY												
10/05/72	5050							30		0.00	--	.		0.01	--	
1400	5050			6.8	74			0	--	--	--	0.1	--	--	0.01	
12/12/72	5050									--	--	.		0.00	--	
1700	5050								--	0.01	--	0.1	--	--	0.01	
02/21/73	5050									0.00	--	.		0.01	--	
	5050								--	0.08	--	0.0	--	--	0.01	
	B5 1410.10			MERCED RIVER ABOVE BRICEBURG												
10/05/72	5050							22		--	--	.		0.02	--	
1130	5050			6.6	61			0	--	0.04	--	0.2	--	--	0.02	
12/12/72	5050									--	--	.		0.01	--	
1450	5050								--	0.04	--	0.1	--	--	0.01	
02/21/73	5050									0.00	--	.		0.01	--	
	5050								--	0.05	--	0.1	--	--	0.02	
07/03/73	5000		17.5C	6.5	16					--	--	.		0.00	--	
1200	5000	864							0.04	--	0.04	0.08	--	--	0.02	
07/04/73	5000		18.0C							--	--	.		0.03	--	
1125	5000	796							0.03	--	0.21	0.24	--	--	0.04	
07/05/73	5000		18.5C							--	--	.		0.02	--	
1000	5000	766							0.01	--	0.26	0.35	--	--	0.05	
	B5 1517.10			MERCED RIVER BELOW EL PORTAL												
10/05/72	5050							18		--	--	.		0.05	--	
1100	5050			6.6	45			0	--	0.16	--	0.2	--	--	0.05	
12/12/72	5050									--	--	.		0.02	--	
1340	5050								--	0.06	--	0.1	--	--	0.05	
02/21/73	5050									0.00	--	.		0.02	--	
	5050								--	0.05	--	0.1	--	--	0.02	
07/03/73	5000		18.0C	6.6	14			9		--	--	.		0.00	--	
1400	5000			7.3	14			0	0.03	--	0.12	0.15	--	--	0.02	
07/04/73	5000		17.0C					14		--	--	.		0.00	--	
1030	5000			7.0	14			0	0.04	--	0.14	0.18	--	--	0.02	
07/05/73	5000		17.0C					10		--	--	.		0.00	--	
0900	5000			7.2	14			0	0.01	--	0.07	0.08	--	--	0.02	
	B5 1519.50			MERCED RIVER AT JUNCTION BIG OAK FLAT RD AND HWY 140												
02/21/73	5050									0.00	--	.		0.02	--	
	5050								--	0.05	--	0.0	--	--	0.02	
	B5 1540.10			MERCED RIVER AT EL CAPITAN BRIDGE												
10/05/72	5050									--	--	.		0.00	--	
0930	5050								--	0.00	--	0.1	--	--	0.00	
10/05/72	5050							14		--	--	.		0.07	--	
1000	5050			7.0	41			0	--	0.28	--	0.1	--	--	0.08	
12/12/72	5050									--	--	.		0.02	--	
1230	5050								--	0.06	--	0.1	--	--	0.02	
07/03/73	5000		15.0C	6.6	11			7		--	--	.		0.00	--	
1500	5000			6.7	11			0	0.01	--	0.04	0.05	--	--	0.00	
07/04/73	5000		12.5C					13		--	--	.		0.00	--	
0935	5000			6.7	11			0	0.02	--	0.27	0.29	--	--	0.00	

TABLE D-6 (Cont'd)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.M. DISCH.	TEMP DEPTH	FIELD PH	LABORATORY EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F ORG N U ORG N	F (NH3 + U ORG N)	DIS A.M.PO4	F PO4 U PO4	F TOT P U TOT P	REM
	B5	1540.10			MERCED RIVER AT EL CAPITAN BRIDGE							CONTINUED				
07/05/73	5000		14.0C					7		--	--	.		0.00	--	
0815	5000	598		6.6	11			0	0.02	--	0.15	0.17	--	--	0.00	
	B5	1700.00			MERCED RIVER AT HAPPY ISLES BRIDGE NEAR YOSEMITE											
10/05/72	5050							6		--	--	.		0.00	--	
0830	5050			6.5	25			0	--	0.07	--	0.1	--	--	0.00	
12/12/72	5050									--	--	.		0.00	--	
1100	5050								--	0.04	--	0.1	--	--	0.01	
02/21/73	5050									0.00	--	.		0.00	--	
	5050								--	0.01	--	0.0	--	--	0.00	
07/03/73	5000		15.5C	6.5	9			6		--	--	.		0.00	--	
1630	5000	468		6.7	8			0	0.01	--	0.47	0.48	--	--	0.00	
07/04/73	5000		11.5C	6.0	9			6		--	--	.		0.00	--	
0840	5000	470		6.9	8			0	0.02	--	0.08	0.10	--	--	0.02	
07/05/73	5000		13.0C					11		--	--	.		0.00	--	
0745	5000			7.1	8			0	0.02	--	0.05	0.07	--	--	0.01	
	B5	4100.00			MERCED RIVER SOUTH FORK NEAR EL PORTAL											
07/03/73	5000		20.5C	6.6	17			16		--	--	.		0.00	--	
1240	5000			7.3	28			0	0.03	--	0.12	0.15	--	--	0.01	
07/04/73	5000		19.5C					20		--	--	.		0.00	--	
1100	5000	123		7.6	37			0	0.03	--	0.19	0.22	--	--	0.01	
07/05/73	5000		19.5C					17		--	--	.		0.00	--	
0925	5000			7.6	31			0	0.04	--	0.06	0.10	--	--	0.01	
	B6	7150.00			FRESNO RIVER NR DAULTON											
07/25/73	5050		83 F	6.8				51		--	--	.		0.04	--	
1245	5050			7.8	164			0	--	0.02	--	0.4	--	--	0.07	
	B7	1340.00			SAN JOAQUIN RIVER ABOVE WILLOW CREEK NEAR AUBERRY											
08/22/73	5050		59 F	6.9	15					0.00	--	.		0.00	--	
0800	5050				16				--	0.05	--	0.1	--	--	0.00	
	B7	1532.50			SAN JOAQUIN RIVER BELOW SHAKEFLAT CREEK											
08/22/73	5050		65 F	7.2	15					0.00	--	.		0.00	--	
1230	5050				20				--	0.03	--	0.1	--	--	0.01	
	B7	4250.50			SAN JOAQUIN RIVER SOUTH FORK AT MONO HOT SPRINGS											
08/21/73	5050		63 F	6.9	20					0.00	--	.		0.00	--	
0930	5050				32				--	0.03	--	0.2	--	--	0.00	
	C0	1140.00			KINGS RIVER BELOW PEOPLES WEIR											
07/24/73	5050		61 F	7.0	50			16		--	--	.		0.00	--	
0645	5050			7.8	39			0	--	0.13	--	0.3	--	--	0.04	
	C0	2185.00			KAWEAH RIVER BELOW TERMINUS DAM											
07/24/73	5050		66 F	6.8	50			18		--	--	.		0.00	--	
0815	5050			7.8	36			0	--	0.02	--	0.2	--	--	0.02	
	C0	2550.30			KAWEAH RIVER AT LEMONCOVE											
05/17/73	5050		54.0F	7.3	35					0.00	--	.		0.01	--	
1230	5050								--	0.05	--	0.1	--	--	0.03	
09/26/73	5050		73.0F	7.3						0.01	--	.		0.01	--	
1500	5050				103				--	0.09	--	0.2	--	--	0.02	
	C0	3195.00			TULE RIVER AT WORTH BRIDGE NEAR PORTERVILLE											
05/10/73	5050		56.0F	8.4	130					0.01	--	.		0.02	--	
1320	5050								--	0.15	--	0.3	--	--	0.08	
09/19/73	5050		77 F	7.6						0.01	--	.		0.02	--	
1100	5050				178				--	0.04	--	0.6	--	--	0.04	
	C0	3196.00			TULE RIVER BELOW SUCCESS DAM											
07/24/73	5050	5.68	65 F	7.0	125			61		--	--	.		0.04	--	
1000	5050			8.4	116			1	--	0.01	--	0.4	--	--	0.11	
	C0	5150.00			KERN RIVER NR BAKERSFIELD											
07/24/73	5050		68 F	7.4	400			31		--	--	.		0.05	--	
1230	5050			7.8	72			0	--	0.31	--	0.3	--	--	0.09	
	C0	5160.10			KERN RIVER AT HART PARK											
04/04/73	5050		51 F	8.3	145					0.00	--	.		0.02	--	
0845	5050								--	0.20	--	0.4	--	--	0.13	
09/12/73	5050		75 F	7.8						0.01	--	.		0.03	--	
1730	5050				99				--	0.29	--	0.2	--	--	0.04	
	C0	5180.10			KERN RIVER AT RANCHERIA BRIDGE											
04/04/73	5050		51 F	7.9	140					0.00	--	.		0.02	--	
0800	5050								--	0.29	--	0.4	--	--	0.11	
09/12/73	5050		73 F	7.7						0.01	--	.		0.03	--	
1645	5050				95				--	0.28	--	0.3	--	--	0.04	

TABLE D-6 (Cont'd)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB MCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U	ORG N ORG N	F U	(NH3 + ORG N)	DIS A.M.PO4	F U	PO4 PO4	F U	TOT P TOT P	REM
	C1 1140.00			KINGS RIVER BELOW PINE FLAT RESERVOIR																
05/24/73	5050		46 F	7.4						0.00		--		.			0.00		--	
0930	5050								--	0.08		--		0.2	--		--		0.01	
07/25/73	5050	7.47	64 F	7.0				12		--		--		.			0.00		--	
0845	5050			7.6	29			0	--	0.08		--		0.1	--		--		0.01	
	C1 1320.00			BIG CREEK ABOVE PINE FLAT RESERVOIR																
05/24/73	5050	2.19	65 F	7.6						0.00		--		.			0.01		--	
1330	5050								--	0.02		--		0.1	--		--		0.02	
	C1 1460.00			KINGS RIVER BELOW NORTH FORK																
05/24/73	5050		52 F	7.1						0.00		--		.			0.00		--	
1215	5050								--	0.03		--		0.1	--		--		0.02	
	C1 4115.30			KINGS RIVER SOUTH FORK AT CEDAR GROVE																
05/24/73	5050		39.0F	7.0						0.00		--		.			0.00		--	
0730	5050								--	0.04		--		0.1	--		--		0.03	
	C2 1210.30			KAWEAH RIVER ABOVE LAKE KAWEAH																
05/17/73	5050		46.0F	7.3	28					0.00		--		.			0.00		--	
1145	5050								--	0.05		--		0.1	--		--		0.04	
09/26/73	5050		67.0F	8.0						0.00		--		.			0.00		--	
1400	5050				120				--	0.01		--		0.1	--		--		0.01	
	C2 2010.30			KAWEAH RIVER NORTH FORK NEAR MOUTH																
05/17/73	5050		46 F	7.6	29					0.00		--		.			0.00		--	
0940	5050								--	0.02		--		0.1	--		--		0.06	
09/26/73	5050		68.0F	7.9						0.00		--		.			0.00		--	
1200	5050				156				--	0.00		--		0.2	--		--		0.01	
	C2 3147.00			KAWEAH RIVER MF BELOW NO 2 INTAKE NR THREE RIVERS																
05/17/73	5050		48.0F	7.3	16					0.00		--		.			0.00		--	
0900	5050								--	0.06		--		0.1	--		--		0.03	
09/26/73	5050		62.0F	7.6						0.00		--		.			0.00		--	
1100	5050				87				--	0.01		--		0.2	--		--		0.02	
	C2 4201.50			KAWEAH RIVER SOUTH FORK ABOVE GROUSE CREEK																
05/17/73	5050		44 F	7.3	23					0.00		--		.			0.00		--	
1030	5050								--	0.02		--		0.1	--		--		0.03	
09/26/73	5050		65 F	7.8						0.00		--		.			0.00		--	
1300	5050				153				--	0.03		--		0.1	--		--		0.01	
	C3 1929.30			TULE RIVER BELOW SPRINGVILLE																
05/10/73	5050		59.0F	7.8	80					0.00		--		.			0.02		--	
1215	5050								--	0.04		--		0.3	--		--		0.04	
09/19/73	5050		69 F	8.2						0.00		--		.			0.01		--	
0915	5050				308				--	0.02		--		0.2	--		--		0.02	
	C3 2190.10			TULE RIVER NORTH FORK AT BEAR CREEK ROAD																
05/10/73	5050		56 F	7.0	35					0.00		--		.			0.00		--	
0930	5050								--	0.05		--		0.2	--		--		0.01	
09/19/73	5050		65.0F	7.4						0.00		--		.			0.00		--	
0715	5050				294				--	0.03		--		0.2	--		--		0.01	
	C3 3200.00			TULE RIVER SOUTH FORK OF MIDDLE FORK NEAR SPRINGVILL																
05/10/73	5050		51.0F	7.8	80					0.00		--		.			0.01		--	
1030	5050								--	0.03		--		0.2	--		--		0.03	
09/19/73	5050		64 F	8.2						0.00		--		.			0.01		--	
0815	5050				356				--	0.02		--		0.1	--		--		0.02	
	C3 4149.30			TULE RIVER SOUTH FORK ABOVE CREW CREEK																
05/10/73	5050		63.0F	7.7	65					0.00		--		.			0.03		--	
1240	5050								--	0.24		--		0.3	--		--		0.15	
09/19/73	5050		71 F	8.4						0.00		--		.			0.02		--	
1000	5050				165				--	0.02		--		0.2	--		--		0.03	
	C5 1220.10			KERN RIVER AT MIRACLE HOT SPRINGS																
04/03/73	5050		45 F	8.3	130					0.00		--		.			0.01		--	
1700	5050								--	0.01		--		0.2	--		--		0.02	
09/12/73	5050		71 F	7.4						0.02		--		.			0.04		--	
1445	5050				92				--	0.16		--		0.4	--		--		0.04	
	C5 1500.00			KERN RIVER AT KERNVILLE																
04/03/73	5050		44 F	8.2	95					0.00		--		.			0.01		--	
1415	5050								--	0.03		--		0.0	--		--		0.02	
09/12/73	5050		65.0F	8.0						0.00		--		.			0.01		--	
1300	5050				138				--	0.06		--		0.2	--		--		0.01	
	C5 1660.10			KERN RIVER ABOVE FAIRVIEW																
04/03/73	5050		43 F	7.8	84					0.00		--		.			0.01		--	
1300	5050								--	0.00		--		0.0	--		--		0.01	
09/12/73	5050		60 F	7.9						0.00		--		.			0.01		--	
1215	5050				118				--	0.00		--		0.1	--		--		0.01	

TABLE D-6 (Cont'd)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	FIELD EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U ORG N	F U (NH3 + ORG N)	OIS A.H.PO4	F U PO4 PO4	F U TOT P TOT P	REM
	CS	31I0.10		KERN RIVER SOUTH FORK NEAR WELDON												
04/03/73	S050		4T	F 7.6	170					0.00	--	.		0.03	--	
1530	S050								--	0.03	--	0.1	--	--	0.03	
09/12/73	S050		66	F 8.0						0.00	--	.		0.10	--	
1030	S050				S11				--	0.03	--	0.3	--	--	0.16	

TABLE D-7

PESTICIDES IN SURFACE WATER

Table D-7 represents the pesticides found in the San Joaquin Valley floor. The samples were collected and analyzed by the Department of Water Resources.

TABLE D-7

PESTICIDES IN SURFACE WATER
COMPOUNDS REPORTED IN NANOGRAMS/LITER

DATE TIME	SAMP LAB	TEMP EC	DO PH	G.H. DEP DISCHARGE	CHLORINATED HYDROCARBON		ORGANIC PHOSPHORUS		OTHER		REM
	80	0470.00		SALT SLOUGH NR STEVINSON							
11/21/72 1130	5050 5050	11 C	7.7	22.48	35	DACTHAL			10	UNKNOWNS	
05/16/73 0955	5050 5050	20 C	7.8		60	DACTHAL	120	UNKNOWNS			
08/15/73 0935	5050 5050	26 C 1100	7.4		35	DACTHAL	80	UNKNOWNS	80	MALATHION	
	80	7020.00		SAN JOAQUIN RIVER NEAR VERNALIS							
11/21/72 1415	5050 5050	12 C 650	8.9 7.4	12.25	10	DDT			NONE	DETECTED	
02/23/73 0750	5050 5050	12 C 800	8.2 7.4	18.96	NONE	DETECTED			NONE	DETECTED	
05/17/73 0730	5050 5050	23 C 700	9.0 7.6	11.82	25	DACTHAL	65	DDT	30	PHORATE	
08/16/73 0830	5050 5050	25.0C 820	9.7 7.7	10.06	100	DDT			NONE	DETECTED	
	80	7375.00		SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE							
11/21/72 1300	5050 5050	12 C	7.7	57.61	15	UNKNOWNS			10	DIAZINON	
02/22/73 1230	5050 5050	15 C	9.6 7.4		NONE	DETECTED			NONE	DETECTED	
05/16/73 1010	5050 5050	26 C	8.0		30	DACTHAL	45	UNKNOWNS	15	PHORATE	
08/15/73 1015	5050 5050	26 C 1500	7.7		30	DACTHAL	120	UNKNOWNS	90	UNKNOWNS	

APPENDIX E

GROUND WATER QUALITY DATA

INTRODUCTION

Appendix E summarizes the ground water quality data for the San Joaquin Valley for the 1973 water year (October 1, 1972, through September 30, 1973). These data were obtained from analyses of water samples from approximately 500 wells.

Laboratory analyses of ground water samples reported herein were performed in accordance with the 13th Edition of "Standard Methods for Examination of Water and Waste Water".

A complete description of the State Well Numbering System, used in this report to indicate the location of the wells sampled, is contained in Appendix C, "Ground Water Data", page 117. A 40-acre tract may contain a well that has not been assigned a state number or may have a well that is of a temporary nature. These are numbered in the 80 series; i.e., 15S/22E-27K<u>80</u>M.

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

This table presents data resulting from the collection and analyses of ground water by various agencies and laboratories cooperating with this program. The code numbers listed below will identify these program cooperators as they appear in this tabulation:

5050 California Department of Water Resources

5060 California Department of Health

5119 Kern County Health Department

5121 Kern County Water Agency

5129 Kings County Water District

5200 City of Fresno

5647 Tehachapi-Cummings Water District

5701 California Water Service Company

5702 Individual Owner

5703 Valley Waste Disposal Company

5720 Bakeman Water Company

5801 Braun, Skaggs, Kevorkian and Simons Laboratory

5802 Twining Laboratory

5803 Hornkohl Laboratory

5806 B. C. Laboratory

5819 Brown and Caldwell Laboratory

Chemical Symbols

B	Boron	K	Potassium
CA	Calcium	Mg	Magnesium
Cl	Chloride	NA	Sodium
CO_3	Carbonate	NO_3	Nitrate
F	Fluoride	SiO_2	Silica
HCO_3	Bicarbonate	SO_4	Sulfate

Abbreviations

EC Specific Electrical Conductance

NCH Non-Carbonate Hardness

SAR Sodium Adsorption Ratio

SUM Sum of Mineral Constituents

TH Total Hardness

TDS Total Dissolved Solids

REM Remarks as follows:

T Indicates the TDS does not fall within 20 percent of the calculated SUM of the constituents.

E Indicates the TDS value is not within the range of 0.35 to 0.70 of the lab electrical conductivity.

S Indicates the anion sum and cation sum for a complete analysis are not within the prescribed tolerance of ±5 percent.

C Indicates the lab electrical conductivity divided by the EC-EPM factor (or if absent, 100) is not within 20 percent of the average of the cation sum and anion sum for a complete analysis.

X Indicates the field electrical conductivity and the lab electrical conductivity are not within 20 percent of each other.

TEMP Water Temperature at Time of Field Sampling

F Fahrenheit
C Celsius

TIME Pacific Standard Time on a 24-Hour Clock

PH Measure of Acidity or Alkalinity

TURB Turbidity in Turbidity Units

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	SIO2	TDS SUM	TH NCH	SAR	REM
			CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	045/08E-33B01	M																		
04/18/73	5050	72 F	7.4	1000	41.	14	220	--	30	482	--	116	17.0	--	--		159			X
1120	5050	22 C	8.8	1260	2.05	1.15	9.57		1.00	7.90		3.27	.27		--		0	7.6		
					16	9	75													
	045/08E-35J01	M																		
04/18/73	5050	64 F	7.4	800	36	13	116	--	8.0	298	--	62	28.0	--	--		145			
1005	5050	18 C	8.5	782	1.80	1.07	5.05		.27	4.88		1.75	.45		--		0	4.2		
					23	14	64													
	055/08E-03A01	M																		
05/08/73	5050	64 F	7.4	1200	45	14	206	--	9.0	408	--	166	10.0	--	--		172			
0845	5050	18 C	8.5	1240	2.25	1.15	8.96		.30	6.69		4.68	.16		--		0	6.9		
					18	9	72													
	055/08E-03R01	M																		
05/08/73	5050	64 F	7.6	1000	39	7.4	206	--	13	298	--	161	19.0	--	--		128			
0730	5050	18 C	8.6	1170	1.95	.61	8.96		.43	4.88		4.54	.31		--		0	7.9		
					17	5	78													
	055/09E-25C01	M																		
05/07/73	5050	68 F	7.2	700	45	13	114	--	15	318	--	40	41.0	--	--		167			
1040	5050	20 C	8.6	789	2.25	1.07	4.96		.50	5.21		1.13	.66		--		0	3.9		
					27	13	60													
	055/10E-21001	M																		
05/07/73	5050	68 F	7.2	700	67	23	78	--	12	318	--	38	59.0	--	--		263			
1255	5050	20 C	8.6	808	3.34	1.89	3.39		.40	5.21		1.07	.95		--		0	2.1		
					39	22	39													
	055/10E-27M01	M																		
05/07/73	5050	64 F	7.4	600	50	16	68	--	9.0	335	--	14	19.0	--	--		191			
0940	5050	18 C	8.5	636	2.50	1.32	2.96		.30	5.49		.39	.31		--		0	2.1		
					37	19	44													
	055/10E-31B01	M																		
05/07/73	5050	68 F	7.4	800	59	16	89	--	9.0	256	--	103	24.0	--	--		212			
1005	5050	20 C	8.6	853	2.94	1.32	3.87		.30	4.20		2.90	.39		--		0	2.7		
					36	16	48													
	115/12E-20E01	M																		
01/03/73	5050	67.1F	7.6	34000	160	45	12500	20	121	83	15900	7790	.2	36.0	--	36200	586			Ex
1100	5050	19.5C	8.7	42600	7.98	3.70	543.75	.51	4.03	1.36	331.04	219.68	.00		--	36613	315	225.0		C
					1	1	98		1		60	40								
	115/12E-20E02	M																		
01/03/73	5050	68.0F	6.4	16000	1560	1010	3220	8.0	0	0	7970	4860	59.0	26.0	--	22300	8040			Ex
1030	5050	20.0C	3.0	20100	77.84	83.06	140.07	.20	.00	.00	165.94	137.05	.95		--	18713	8051	15.6		C
					26	28	47				55	45								
	115/12E-20E03	M																		
01/03/73	5050	68.0F	7.6	3450	--	--	--	--	--	--	--	807	.1	--	--					
1040	5050	20.0C		4080								22.76	.00		--					
	125/19E-13A01	M																		
12/05/72	5050	61 F	7.0	150	9.7	7.5	15	--	0	54	--	12	31.0	.00	--		55			
1220	5050	16 C	6.7	187	.48	.62	.65		.00	.89		.34	.50		--		11	0.9		
					27	35	37			51		20	29							
	125/20E-18B02	M																		
12/05/72	5050	66 F	7.1	160	10	8.3	14	--	0	66	--	11	16.0	.00	--		59			
1200	5050	19 C	7.3	178	.50	.68	.61		.00	1.08		.31	.26		--		5	0.8		
					28	38	34			65		19	16							
	125/20E-32D02	M																		
04/12/73	5050				41	18	25	--	0	229	--	18	19.0	--	--		178			
1315	5050		7.9	468	2.05	1.48	1.09		.00	3.75		.51	.31		--		0	0.8		
					44	32	24			82		11	7							
	125/20E-33M02	M																		
04/12/73	5050				21	10	15	--	0	131	--	6.7	7.2	--	--		92			
1310	5050		7.8	244	1.05	.82	.65		.00	2.15		.19	.12		--		0	0.7		
					42	33	26			87		8	5							
	135/13E-26N03	M																		
07/26/73	5050	80.0F	7.6	1512	56	31	250	--	0	262	--	77	3.4	--	--		269			
1115	5050	26.6C	8.2	1580	2.79	2.55	10.88		.00	4.29		2.17	.05		--		53	6.7		
					17	16	67			66		33	1							
	135/19E-28C01	M																		
08/15/73	5200				24	11	23	--	0	150	15	10	4.6	--	.2	203	108			
	5802		7.7		1.21	.94	1.00		.00	2.46	.32	.30	.07		32.4	195	0	1.0		
					38	30	32			78	10	10	2							
	135/20E-02G01	M																		
08/15/73	5200				22	10	17	--	0	137	5.3	10	5.5	--	.1	176	99			
	5802		7.6		1.13	.86	.76		.00	2.25	.11	.30	.09		29.2	168	0	0.8		
					41	31	28			82	4	11	3							
	135/20E-03H02	M																		
08/15/73	5200				24	9.5	21	--	0	143	9.5	10	2.9	--	.1	191	100			
	5802		7.7		1.21	.78	.91		.00	2.34	.20	.30	.05		33.2	181	0	0.9		
					42	27	31			81	7	10	2							
	135/20E-04M02	M																		
04/12/73	5050				21	10	15	--	0	130	--	7.5	11.0	--	--		95			
1320	5050		8.0	254	1.05	.82	.65		.00	2.13		.21	.18		--		0	0.7		
					42	33	26			85		8	7							

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER B	F SIO2	TDS SUM	TH NCM	SAR	REM
			CENTRAL VALLEY SAN JOAQUIN VALLEY																
	13S/20E-10A01 M																		
08/15/73	5200				20	9.5	13	--	0	122	9.5	7.1	5.5	--	.1	168	91		
	5802		7.8		1.04	.78	.59		.00	2.00	.20	.20	.09		32.4	158	0	0.6	
					43	32	24			80	8	8	4						
	13S/20E-10D01 M																		
08/15/73	5200				19	10	20	--	0	122	6.4	10	14.6	--	.2	200	91		
	5802		7.7		.95	.86	.87		.00	2.00	.13	.30	.24		34.8	176	0	0.9	
					35	32	32			75	5	11	9						
	13S/20E-11C02 M																		
08/15/73	5200				36	18	25	--	0	207	23	10	14.2	--	.2	284	165		
	5802		7.6		1.82	1.48	1.11		.00	3.39	.49	.30	.23		29.6	260	0	0.9	
					41	34	25			77	11	7	5						
	13S/20E-11L01 M																		
08/15/73	5200				33	18	20	--	0	192	18	10	9.7	--	.1	287	157		
	5802		7.6		1.65	1.48	.87		.00	3.15	.38	.30	.16		42.4	247	0	0.7	
					41	37	22			79	10	8	4						
	13S/20E-13C02 M																		
08/15/73	5200				22	13	19	--	0	140	14	10	9.3	--	.1	211	111		
	5802		7.7		1.13	1.09	.83		.00	2.29	.29	.30	.15		27.2	185	0	0.8	
					37	36	27			76	10	10	5						
	13S/20E-13E01 M																		
08/15/73	5200				19	11	18	--	0	134	9.5	10	9.3	--	.1	192	95		
	5802		7.8		.95	.94	.80		.00	2.20	.20	.30	.15		38.4	183	0	0.8	
					35	35	30			77	7	11	5						
	13S/20E-13H01 M																		
08/15/73	5200				19	10	21	--	0	122	11	10	12.0	--	.2	190	91		
	5802		7.7		.95	.86	.94		.00	2.00	.25	.30	.19		39.6	185	0	1.0	
					35	31	34			73	9	11	7						
	13S/20E-14A01 M																		
08/15/73	5200				19	11	13	--	0	125	6.2	7.1	5.5	--	.1	176	95		
	5802		7.7		.95	.94	.59		.00	2.05	.13	.20	.09		26.0	150	0	0.6	
					38	38	24			83	5	8	4						
	13S/20E-14M01 M																		
08/15/73	5200				17	10	17	--	0	116	13	10	4.9	--	.2	176	86		
	5802		7.8		.87	.86	.76		.00	1.90	.27	.30	.08		26.4	157	0	0.8	
					35	35	31			75	11	12	3						
	13S/20E-15L01 M																		
08/15/73	5200				20	12	31	--	0	174	7.0	10	6.2	--	.1	211	103		
	5802		7.4		1.04	1.01	1.35		.00	2.85	.15	.30	.10		30.4	204	0	1.3	
					31	30	40			84	4	9	3						
	13S/20E-16Q01 M																		
08/15/73	5200				19	9.5	17	--	0	119	9.9	10	9.3	--	.2	167	82		
	5802		7.8		.95	.78	.74		.00	1.95	.21	.30	.15		28.8	163	0	0.8	
					38	32	30			75	8	11	6						
	13S/20E-17F01 M																		
08/15/73	5200				17	10	13	--	0	107	11	10	4.4	--	.1	194	86		
	5802		7.8		.87	.86	.57		.00	1.75	.23	.30	.07		40.8	160	0	0.6	
					38	37	25			74	10	13	3						
	13S/20E-18E01 M																		
08/15/73	5200				20	10	16	--	0	122	11	10	4.0	--	.2	196	95		
	5802		7.8		1.04	.86	.70		.00	2.00	.23	.30	.06		48.4	181	0	0.7	
					40	33	27			77	9	12	2						
	13S/20E-19A01 M																		
08/15/73	5200				17	7.6	17	--	0	101	11	10	4.0	--	.2	183	75		
	5802		7.9		.87	.63	.76		.00	1.66	.23	.30	.06		40.4	158	0	0.9	
					38	28	34			74	10	13	3						
	13S/20E-19C01 M																		
08/15/73	5200				17	10	15	--	0	110	13	10	4.4	--	.2	192	86		
	5802		7.8		.87	.86	.65		.00	1.80	.27	.30	.07		48.4	173	0	0.7	
					37	36	27			74	11	12	3						
	13S/20E-20E01 M																		
08/15/73	5200				13	7.6	18	--	0	95	7.4	10	5.5	--	.2	156	66		
	5802		7.8		.69	.63	.78		.00	1.56	.15	.30	.09		38.8	149	0	1.0	
					33	30	37			74	7	14	4						
	13S/20E-20H01 M																		
08/15/73	5200				20	10	8.5	--	0	107	9.5	10	12.4	--	.2	208	95		
	5802		7.8		1.04	.86	.37		.00	1.75	.20	.30	.20		44.8	170	8	0.4	
					46	38	16			71	8	12	8						
	13S/20E-20N01 M																		
08/15/73	5200				36	18	12	--	0	189	14	10	13.3	--	.1	275	169		
	5802		7.6		1.82	1.55	.54		.00	3.10	.30	.30	.21		34.0	233	14	0.4	
					47	40	14			79	8	8	5						
	13S/20E-20R01 M																		
08/15/73	5200				17	8.6	18	--	0	110	7.8	10	6.2	--	.2	174	79		
	5802		7.7		.87	.71	.78		.00	1.80	.16	.30	.10		45.6	168	0	0.9	
					37	30	33			76	7	13	4						
	13S/20E-21K02 M																		
08/15/73	5200				15	8.5	18	--	0	101	17	7.1	3.5	--	.2	148	74		
	5802		7.8		.78	.70	.80		.00	1.66	.37	.20	.06		21.6	142	0	0.9	
					34	31	35			72	16	9	3						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
			CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	13S/20E-22A01	M																		
08/15/73	5200					15	8.5	15	--	0	98	9.6	7.1	7.5	--	.2	207	74		
	5802			7.8		.78	.70	.65		.00	1.61	.20	.20	.12		46.8	158	0	0.8	T
						37	33	31			76	9	9	6						
	13S/20E-23B01	M																		
08/15/73	5200					13	9.5	14	--	0	98	12	7.1	6.7	--	.2	160	74		
	5802			7.8		.69	.78	.61		.00	1.61	.26	.20	.11		25.2	137	0	0.7	
						33	38	29			74	12	9	5						
	13S/20E-23J01	M																		
08/15/73	5200					19	8.5	21	--	0	113	12	10	9.3	--	.2	178	83		
	5802			7.7		.95	.70	.91		.00	1.85	.27	.30	.15		31.6	168	0	1.0	
						37	27	36			72	11	12	6						
	13S/20E-23Q01	M																		
08/15/73	5200					22	14	22	--	0	153	11	10	15.1	--	.2	240	115		
	5802			7.6		1.13	1.17	.98		.00	2.51	.24	.30	.24		42.0	214	0	0.9	
						34	36	30			76	7	9	7						
	13S/20E-26D01	M																		
08/15/73	5200					15	6.6	21	--	0	101	7.8	10	7.5	--	.1	160	66		
	5802			7.8		.78	.54	.91		.00	1.66	.16	.30	.12		29.2	148	0	1.1	
						35	24	41			74	7	13	5						
	13S/20E-27C01	M																		
08/15/73	5200					12	6.6	19	--	0	85	10	7.1	9.3	--	.2	159	58		
	5802			7.8		.61	.54	.85		.00	1.39	.22	.20	.15		25.2	132	0	1.1	
						31	27	43			71	11	10	8						
	13S/20E-27J01	M																		
08/15/73	5200					22	15	23	--	0	146	16	10	21.3	--	.2	226	119		
	5802			7.8		1.13	1.25	1.00		.00	2.39	.33	.30	.34		31.2	212	0	0.9	
						33	37	30			71	10	9	10						
	13S/20E-28E01	M																		
08/15/73	5200					22	14	24	--	0	159	12	10	11.5	--	.2	244	115		
	5802			7.7		1.13	1.17	1.05		.00	2.61	.26	.30	.19		44.4	218	0	1.0	
						34	35	31			78	8	9	6						
	13S/20E-28N01	M																		
08/15/73	5200					19	10	25	--	0	128	11	10	16.8	--	.1	224	91		
	5802			7.8		.95	.86	1.11		.00	2.10	.24	.30	.27		44.0	201	0	1.2	
						33	29	38			72	8	10	9						
	13S/20E-28R01	M																		
08/15/73	5200					15	8.5	19	--	0	98	13	7.1	15.1	--	.2	186	74		
	5802			7.6		.78	.70	.85		.00	1.61	.28	.20	.24		48.0	176	0	1.0	
						33	30	36			69	12	9	10						
	13S/20E-29K01	M																		
08/15/73	5200					20	13	23	--	0	140	8.6	14	15.1	--	.2	216	107		
	5802			7.6		1.04	1.09	1.00		.00	2.29	.18	.40	.24		38.4	202	0	1.0	
						33	35	32			74	6	13	8						
	13S/20E-30B01	M																		
08/15/73	5200					15	7.6	16	--	0	98	11	7.1	4.4	--	.2	183	71		
	5802			7.9		.78	.63	.72		.00	1.61	.25	.20	.07		52.0	163	0	0.9	
						37	30	34			76	12	9	3						
	13S/20E-32D01	M																		
08/15/73	5200					20	10	18	--	0	119	14	14	11.3	--	.2	230	95		
	5802			7.8		1.04	.86	.78		.00	1.95	.31	.40	.18		50.4	199	0	0.8	
						39	32	29			69	11	14	6						
	13S/20E-32L02	M																		
08/15/73	5200					29	18	36	--	0	192	20	21	23.0	--	.1	303	148		
	5802			7.7		1.48	1.48	1.57		.00	3.15	.42	.60	.37		50.4	293	0	1.3	
						33	33	35			69	9	13	8						
	13S/20E-33J01	M																		
08/15/73	5200					24	13	25	--	0	156	10	14	13.7	--	.2	245	115		
	5802			7.7		1.21	1.09	1.09		.00	2.56	.22	.40	.22		44.0	222	0	1.0	
						36	32	32			75	6	12	6						
	13S/20E-34R01	M																		
08/15/73	5200					19	11	20	--	0	119	11	10	16.8	--	.1	226	95		
	5802			7.6		.95	.94	.87		.00	1.95	.24	.30	.27		38.4	186	0	0.9	
						34	34	32			71	9	11	10						
	13S/20E-34M01	M																		
08/15/73	5200					20	12	18	4.0	0	94	20	5.1	27.9	--	.2	230	104		
	5801			7.4		1.02	1.05	.81	.10	.00	1.54	.42	.14	.45		--	155	27	0.8	T
						34	35	27	3		60	16	5	18						S
	13S/20E-35D01	M																		
08/15/73	5200					20	11	19	--	0	122	15	10	11.5	--	.2	216	99		
	5802			7.7		1.04	.94	.83		.00	2.00	.32	.30	.19		28.8	177	0	0.8	
						37	33	30			71	11	11	7						
	13S/20E-35H02	M																		
08/15/73	5200					24	12	26	--	0	131	18	14	24.8	--	.2	259	111		
	5802			7.7		1.21	1.01	1.15		.00	2.15	.38	.40	.40		36.0	221	4	1.1	
						36	30	34			65	11	12	12						
	13S/20E-36P01	M																		
08/15/73	5200					20	20	22	--	0	168	15	14	15.1	--	.1	270	138		
	5802			7.7		1.04	1.71	.98		.00	2.75	.32	.40	.24		33.2	225	0	0.8	
						28	46	26			74	9	11	6						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD PH	LABORATORY EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
						MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER									MILLIGRAMS PER LITER					
						MILLIEQUIVALENTS PER LITER														
						PERCENT REACTANCE VALUE														
	CENTRAL VALLEY SAN JOAQUIN VALLEY																			
	135/21E-04N01	M																		
11/16/72	5801					38	11	12	6.3	0	146	17	11	19.7	--	.2	300	144		
	5801			7.4		1.93	.94	.54	.16	.00	2.39	.36	.33	.32		--	189	24	0.4	T
						54	26	15	4		70	11	10	9						
	135/21E-04P01	M																		
11/16/72	5801					28	11	7.9	6.3	0	120	6.7	8.6	13.1	--	.2	217	118		
	5801			7.5		1.40	.96	.34	.16	.00	1.97	.14	.24	.21		--	141	20	0.3	T
						49	34	12	6		77	5	9	8						5
	135/21E-05J01	M																		
11/16/72	5801					42	7.8	21	6.3	0	163	17	7.6	19.7	--	.2	288	138		
	5801			7.3		2.12	.64	.94	.16	.00	2.67	.36	.21	.32		--	203	5	0.8	T
						55	17	24	4		75	10	6	9						5
	135/21E-05Q01	M																		
11/16/72	5801					29	9.1	10	6.3	0	114	18	8.6	14.6	--	.2	250	112		
	5801			7.4		1.49	.75	.47	.16	.00	1.87	.37	.24	.24		--	153	19	0.4	T
						52	26	16	6		69	14	9	9						5
	135/21E-07G02	M																		
11/16/72	5801					23	7.9	16	4.0	0	108	10	5.8	12.4	--	.2	222	91		
	5801			7.3		1.16	.65	.72	.10	.00	1.77	.21	.16	.20		--	133	2	0.8	T
						44	25	27	4		76	9	7	9						5
	135/21E-08E01	M																		
11/16/72	5801					33	11	16	4.0	0	127	16	15	27.0	--	.2	276	131		
	5801			7.3		1.66	.96	.72	.10	.00	2.08	.34	.42	.44		--	186	27	0.6	T
						48	28	21	3		63	10	13	13						
	135/21E-08J01	M																		
11/16/72	5801					28	10	13	4.0	0	122	7.8	10	20.8	--	.2	255	115		
	5801			7.4		1.40	.90	.59	.10	.00	2.00	.16	.31	.34		--	156	15	0.5	T
						47	30	20	3		71	6	11	12						5
	135/21E-17F01	M																		
11/16/72	5801					27	7.6	15	4.0	0	79	20	5.3	26.1	--	.2	222	99		
	5801			7.5		1.36	.63	.67	.10	.00	1.29	.42	.15	.42		--	144	35	0.7	T
						49	23	24	4		57	18	7	18						5
	135/21E-18M01	M																		
11/16/72	5801					20	12	18	4.0	0	94	20	5.1	27.9	--	.2	230	104		
	5801			7.4		1.02	1.05	.81	.10	.00	1.54	.42	.14	.45		--	155	27	0.8	T
						34	35	27	3		60	16	5	18						5
	135/21E-21P01	M																		
08/15/73	5200					33	19	30	--	0	207	21	14	20.4	--	.2	275	164		
	5802			7.7		1.65	1.64	1.31		.00	3.39	.45	.40	.33		28.0	269	0	1.0	
						36	36	28			74	10	9	7						
	135/21E-29A01	M																		
08/15/73	5200					41	21	37	--	0	238	17	28	27.0	--	.1	347	194		
	5802			7.6		2.08	1.79	1.63		.00	3.90	.37	.80	.44		46.0	337	0	1.2	
						38	33	30			71	7	15	8						
	135/21E-31A02	M																		
08/15/73	5200					29	16	35	--	0	189	16	17	23.5	--	.2	278	140		
	5802			7.6		1.48	1.32	1.52		.00	3.10	.33	.50	.38		29.6	260	0	1.3	
						34	31	35			72	8	12	9						
	135/21E-31E02	M																		
08/15/73	5200					36	20	32	--	0	207	23	21	26.6	--	.2	328	177		
	5802			7.5		1.82	1.71	1.39		.00	3.39	.48	.60	.43		35.2	297	7	1.0	
						37	35	28			69	10	12	9						
	135/21E-31R01	M																		
09/24/73	5802					50	26	41	--	0	296	22	25	24.0	--	--	407	232		
	5802			7.4		2.50	2.14	1.78		.00	4.85	.46	.71	.39		43.0	377	0	1.2	
						39	33	28			76	7	11	6						
	135/21E-32N02	M																		
09/24/73	5802					65	33	52	--	0	363	29	39	33.0	--	--	480	298		
	5802			7.2		3.24	2.71	2.26		.00	5.95	.60	1.10	.53		38.0	467	0	1.3	
						39	33	28			73	7	13	6						
	145/12E-25Q01	M																		
07/25/73	5050		85.0F	7.6	2300	92	65	358	--	0	183	--	149	5.0	--	--		499		
0950	5050		29.4C	7.7	2390	4.59	5.35	15.57		.00	3.00		4.20	.08		--		347	7.0	
						18	21	61			41		58	1						
	145/13E-04P01	M																		
07/25/73	5050		82.0F	7.4	2660	177	176	158	--	0	166	--	156	26.0	--	--		1170		
1230	5050		27.8C	7.8	2760	8.83	14.47	6.87		.00	2.72		4.40	.42		--		1030	2.0	
						29	48	23			36		58	6						
	145/13E-11R01	M																		
07/25/73	5050		80.0F	7.8	1482	52	37	234	--	0	255	--	70	10.0	--	--		284		
0650	5050		26.6C	8.0	1520	2.59	3.04	10.18		.00	4.18		1.97	.16		--		73	6.1	
						16	19	64			66		31	3						
	145/13E-12N02	M																		
07/25/73	5050		82.0F	7.8	1556	27	7.9	308	--	0	242	--	161	2.7	--	--		100		
0700	5050		27.8C	8.2	1600	1.35	.65	13.40		.00	3.97		4.54	.04		--		0	13.4	
						9	4	87			46		53							
	145/13E-13E02	M																		
07/24/73	5050		79.0F	8.0	1342	38	24	234	--	0	249	--	61	2.2	--	--		196		
0710	5050		26.1C	8.1	1400	1.90	1.97	10.18		.00	4.08		1.72	.04		--		0	7.3	
						14	14	72			70		29	1						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	SAR	REM
					MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER					MILLIGRAMS PER LITER					
					MILLIEQUIVALENTS PER LITER														
					PERCENT REACTANCE VALUE														
	CENTRAL VALLEY SAN JOAQUIN VALLEY																		
	14S/13E-21N01	M																	
07/25/73	5050	78.0F	7.4	2680	154	173	255	--	0	203	--	148	9.0	--	--		1100		
0830	5050	25.5C	7.9	2790	7.68	14.23	11.09		.00	3.33		4.17	.15		--		930	3.4	
					23	43	34			44		55	2						
	14S/13E-26E01	M																	
07/25/73	5050	81.0F	7.8	1770	94	109	172	--	0	212	--	79	2.2	--	--		683		
0745	5050	27.2C	8.0	1840	4.69	8.96	7.48		.00	3.47		2.23	.04		--		509	2.9	
					22	42	35			60		39	1						
	14S/14E-09E02	M																	
07/24/73	5050	76.0F	7.8	456	20	13	53	--	0	93	--	72	1.9	--	--		104		
0820	5050	24.4C	7.8	476	1.00	1.07	2.31		.00	1.52		2.03	.03		--		28	2.3	
					23	24	53			42		57	1						
	14S/14E-09Q01	M																	
07/24/73	5050	80.0F	7.8	2300	51	20	433	--	0	184	--	345	1.0	--	--		210		
0905	5050	26.6C	7.8	2320	2.54	1.64	18.84		.00	3.02		9.73	.02		--		58	13.0	
					11	7	82			24		76							
	14S/14E-10N04	M																	
07/24/73	5050	76.0F	7.2	4860	334	206	646	--	0	173	--	674	76.0	--	--		1680		
0915	5050	24.4C	7.8	5150	16.67	16.94	28.10		.00	2.84		19.01	1.23		--		1540	6.9	
					27	27	46			12		82	5						
	14S/14E-33E02	M																	
07/24/73	5050	82.0F	8.0	1522	27	3.8	323	--	0	197	--	98	2.1	--	--		83		
1300	5050	27.8C	8.1	1590	1.35	.31	14.05		.00	3.23		2.76	.03		--		0	15.4	
					9	2	89			54		46							
	14S/15E-03A03	M																	
07/30/73	5050	70.5F	7.8	860	7.5	3.5	188	--	0	249	--	136	1.4	--	--		33		
0930	5050	21.4C	8.1	891	.37	.29	8.18		.00	4.08		3.84	.02		--		0	14.2	
					4	3	93			51		48							
	14S/15E-05A01	M																	
08/02/73	5050	68.0F	8.3	1746	12	2.9	375	--	0	205	--	469	.8	--	--		42		
0900	5050	20.0C	8.0	1810	.60	.24	16.31		.00	3.36		13.23	.01		--		0	25.2	
					3	1	95			20		80							
	14S/16E-04C01	M																	
07/30/73	5050	69.0F	8.6	436	2.3	1.6	95	--	0	142	--	60	.2	--	--		12		
0730	5050	20.5C	8.0	452	.11	.13	4.13		.00	2.33		1.69	.00		--		0	11.8	
					3	3	95			58		42							
	14S/16E-05C01	M																	
07/30/73	5050	69.5F	8.5	618	1.6	.7	134	--	0	157	--	110	.0	--	--		7		
0750	5050	20.8C	8.1	632	.08	.06	5.83		.00	2.57		3.10	.00		--		0	22.2	
					1	1	98			45		55							
	14S/16E-08D01	M																	
07/24/73	5050	70.0F	8.4	1282	14	1.7	271	--	0	145	--	318	.5	--	--		42		
1205	5050	21.1C	7.9	1340	.70	.14	11.79		.00	2.38		8.97	.01		--		0	18.2	
					6	1	93			21		79							
	14S/16E-13L02	M																	
07/26/73	5050	72.5F	8.4	663	12	1.9	128	--	0	167	--	111	.0	--	--		38		
1020	5050	22.5C	8.0	680	.60	.16	5.57		.00	2.74		3.13	.00		--		0	9.1	
					9	3	88			47		53							
	14S/16E-15J01	M																	
08/01/73	5050	73.0F	7.9	3780	42	11	784	--	0	178	--	1110	.1	--	--		149		
0850	5050	22.8C	7.8	3910	2.10	.90	34.10		.00	2.92		31.30	.00		--		4	27.8	
					6	2	92			9		91							
	14S/16E-23A01	M																	
07/26/73	5050	75.0F	8.1	4360	52	9.8	880	--	0	217	--	1340	.1	--	--		170		
1040	5050	23.9C	7.9	4610	2.59	.81	38.28		.00	3.56		37.79	.00		--		0	29.4	
					6	2	92			9		91							
	14S/16E-24B01	M																	
07/26/73	5050	74.0F	8.2	3220	45	7.3	650	--	0	238	--	940	.1	--	--		142		
0950	5050	23.3C	8.0	3420	2.25	.60	28.28		.00	3.90		26.51	.00		--		0	23.7	
					7	2	91			13		87							
	14S/16E-35H01	M																	
07/27/73	5050	71.0F	7.9	2220	16	2.9	469	--	0	418	--	510	.0	--	--		52		
0900	5050	21.6C	8.1	2240	.80	.24	20.40		.00	6.85		14.38	.00		--		0	28.3	
					4	1	95			32		68							
	14S/17E-09A01	M																	
07/30/73	5050	72.0F	7.3	1296	82	37	73	--	0	162	--	178	9.9	--	--		358		X
1245	5050	22.2C	7.6	1070	4.09	3.04	3.18		.00	2.66		5.02	.16		--		224	1.7	
					40	29	31			34		64	2						
	14S/17E-14J01	M																	
07/25/73	5050	71.0F	7.2	724	59	26	33	--	0	150	--	100	23.0	--	--		253		
0730	5050	21.6C	7.7	696	2.94	2.14	1.44		.00	2.46		2.82	.37		--		131	0.9	
					45	33	22			44		50	7						
	14S/17E-15N01	M																	
07/26/73	5050	74.5F	8.4	220	15	1.1	40	--	0	120	--	13	5.4	--	--		42		
0700	5050	23.6C	8.0	253	.75	.09	1.74		.00	1.97		.37	.09		--		0	2.7	
					29	3	67			81		15	4						
	14S/17E-20P01	M																	
07/27/73	5050	72.0F	7.8	360	24	5.6	41	--	0	125	--	39	.4	--	--		83		
0650	5050	22.2C	7.9	361	1.20	.46	1.78		.00	2.05		1.10	.01		--		0	2.0	
					35	13	52			65		35							

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
		CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	14S/17E-25C01 M																		
07/25/73	5050	72.0F	7.4	890	61	29	49	--	0	192	--	109	2.8	--	--		271		
0830	5050	22.2C	7.5	792	3.04	2.38	2.13		.00	3.15		3.07	.05		--		114	1.3	
					40	32	28			50		49	1						
	14S/17E-31R01 M																		
07/27/73	5050	73.0F	7.9	906	29	6.0	152	--	0	179	--	179	3.6	--	--		97		
0810	5050	22.8C	7.9	921	1.45	.49	6.61		.00	2.93		5.05	.06		--		0	6.7	
					17	6	77			36		63	1						
	14S/18E-10F01 M																		
07/25/73	5050	72.5F	7.2	684	30	24	61	--	0	234	--	48	34.0	--	--		176		
1010	5050	22.5C	7.8	620	1.50	1.97	2.65		.00	3.84		1.35	.55		--		0	2.0	
					25	32	43			67		24	10						
	14S/18E-13H01 M																		
07/25/73	5050	77.0F	7.2	474	35	23	26	--	0	212	--	19	26.0	--	--		184		
1300	5050	25.0C	7.9	456	1.75	1.89	1.13		.00	3.47		.54	.42		--		9	0.8	
					37	40	24			78		12	9						
	14S/18F-14J01 M																		
07/26/73	5050		7.3	720	29	31	52	--	0	250	--	30	44.0	--	--		201		
0730	5050		7.8	601	1.45	2.55	2.26		.00	4.10		.85	.71		--		0	1.6	
					23	41	36			72		15	13						
	14S/18F-17M01 M																		
07/26/73	5050		7.2	1826	50	63	178	--	0	250	--	282	38.0	--	--		385		
1130	5050		7.8	1560	2.50	5.18	7.74		.00	4.10		7.95	.61		--		179	4.0	
					16	34	50			32		63	5						
	14S/18E-30B01 M																		
07/26/73	5050		7.1	914	42	33	62	--	0	203	--	97	34.0	--	--		241		
1245	5050		7.8	789	2.10	2.71	2.70		.00	3.33		2.74	.55		--		74	1.7	
					28	36	36			50		41	8						
	14S/19E-05C01 M																		
07/31/73	5050	72.0F	7.2	710	61	36	36	--	0	335	--	40	32.0	--	--		300		
0630	5050	22.2C	8.2	715	3.04	2.96	1.57		.00	5.49		1.13	.52		--		26	0.9	
					40	39	21			77		16	7						
	14S/19E-06A01 M																		
07/31/73	5050	73.0F	7.2	624	45	26	47	--	0	248	--	43	41.0	--	--		220		
0620	5050	22.8C	8.2	635	2.25	2.14	2.04		.00	4.06		1.21	.66		--		17	1.4	
					35	33	32			68		20	11						
	14S/19E-08Q01 M																		
07/31/73	5050	73.0F	7.2	426	36	18	22	--	0	180	--	34	15.0	--	--		166		
0650	5050	22.8C	8.0	440	1.80	1.48	.96		.00	2.95		.96	.24		--		17	0.7	
					42	35	23			71		23	6						
	14S/19E-09J01 M																		
08/01/73	5050	73.0F	7.2	330	24	14	21	--	0	138	--	22	13.0	--	--		118		
0720	5050	22.8C	7.8	345	1.20	1.15	.91		.00	2.26		.62	.21		--		5	0.8	
					37	35	28			73		20	7						
	14S/19E-13R01 M																		
08/01/73	5050	75.0F	7.2	340	23	15	22	--	0	122	--	26	27.0	--	--		118		
0950	5050	23.9C	7.8	363	1.15	1.23	.96		.00	2.00		.73	.44		--		19	0.9	
					34	37	29			63		23	14						
	14S/19E-14M02 M																		
07/31/73	5050	74.0F	7.2	188	12	6.6	17	--	0	83	--	6.4	6.5	--	--		57		
1300	5050	23.3C	7.7	191	.60	.54	.74		.00	1.36		.18	.10		--		0	1.0	
					32	29	39			83		11	6						
	14S/19E-15R01 M																		
07/31/73	5050	73.0F	7.2	318	22	13	20	--	0	135	--	16	16.0	--	--		109		
1230	5050	22.8C	7.9	330	1.10	1.07	.87		.00	2.21		.45	.26		--		0	0.8	
					36	35	29			76		15	9						
	14S/19E-20K02 M																		
07/31/73	5050	72.0F	7.2	1080	47	53	70	--	0	440	--	59	17.0	--	--		334		
1130	5050	22.2C	7.9	919	2.35	4.36	3.05		.00	7.21		1.66	.27		--		0	1.7	
					24	45	31			79		18	3						
	14S/19E-26M01 M																		
07/31/73	5050	78.0F	7.2	1220	76	64	42	--	0	379	--	125	30.0	--	--		452		
1045	5050	25.5C	7.8	1070	3.79	5.26	1.83		.00	6.21		3.53	.48		--		142	0.9	
					35	48	17			61		35	5						
	14S/19E-29R01 M																		
07/31/73	5050	72.0F	7.2	1258	43	58	106	--	0	494	--	85	15.0	--	--		345		
0900	5050	22.2C	7.9	1060	2.15	4.77	4.61		.00	8.10		2.40	.24		--		0	2.5	
					19	41	40			75		22	2						
	14S/19E-30A01 M																		
07/31/73	5050	70.0F	7.2	872	42	42	49	--	0	301	--	67	14.0	--	--		278		
0800	5050	21.1C	7.9	762	2.10	3.45	2.13		.00	4.93		1.89	.23		--		31	1.3	
					27	45	28			70		27	3						
	14S/19E-33C01 M																		
07/31/73	5050	75.0F	7.2	1156	45	56	82	--	0	499	--	65	4.7	--	--		345		
0915	5050	23.9C	7.9	968	2.25	4.61	3.57		.00	8.18		1.83	.08		--		0	1.9	
					22	44	34			81		18	1						
	14S/19E-36C01 M																		
07/31/73	5050	72.0F	7.0	756	41	38	28	--	0	285	--	44	20.0	--	--		260		
1015	5050	22.2C	7.9	638	2.05	3.13	1.22		.00	4.67		1.24	.32		--		26	0.8	
					32	49	19			75		20	5						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	SAR	REM
						MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER									MILLIGRAMS PER LITER					
						MILLIEQUIVALENTS PER LITER														
						PERCENT REACTANCE VALUE														
	CENTRAL VALLEY SAN JOAQUIN VALLEY																			
	14S/20E-01G01	M				29	23	24	--	0	195	21	17	21.7	--	.1	314	172		
08/15/73	5200			7.7		1.48	1.95	1.07		.00	3.20	.44	.50	.35		47.2	282	12	0.8	
	5802					33	43	24			71	10	11	8						
	14S/20E-01J01	M				20	13	28	--	0	146	11	14	19.5	--	.2	244	107		
08/15/73	5200			7.7		1.04	1.09	1.22		.00	2.39	.23	.40	.31		47.6	226	0	1.2	
	5802					31	33	36			72	7	12	9						
	14S/20E-02J02	M				36	20	34	--	0	204	18	21	19.5	--	.1	324	177		
08/15/73	5200			7.6		1.82	1.71	1.51		.00	3.34	.38	.60	.31		36.4	288	10	1.1	
	5802					36	34	30			72	8	13	7						
	14S/20E-02Q01	M				33	19	29	--	0	204	13	17	25.7	--	.1	305	164		
08/15/73	5200			7.6		1.65	1.64	1.26		.00	3.34	.28	.50	.41		41.6	281	0	1.0	
	5802					36	36	28			74	6	11	9						
	14S/20E-03C02	M				31	15	29	--	0	183	15	17	17.7	--	.2	288	141		
08/15/73	5200			7.7		1.56	1.25	1.28		.00	3.00	.32	.50	.29		42.4	259	0	1.1	
	5802					38	31	31			73	8	12	7						
	14S/20E-03J01	M				34	18	22	--	0	189	13	21	16.8	--	.2	322	165		
08/15/73	5200			7.5		1.74	1.55	.98		.00	3.10	.29	.60	.27		40.4	261	10	0.8	
	5802					41	36	23			73	7	14	6						
	14S/20E-03M01	M				33	16	34	--	0	189	16	24	20.4	--	.2	298	149		
08/15/73	5200			7.7		1.65	1.32	1.48		.00	3.10	.33	.70	.33		52.0	289	0	1.2	
	5802					37	30	33			70	7	16	7						
	14S/20E-04F01	M				27	14	16	--	0	159	12	14	12.4	--	.1	262	128		
08/15/73	5200			7.6		1.39	1.17	.70		.00	2.61	.26	.40	.20		46.4	221	0	0.6	
	5802					43	36	21			75	7	12	6						
	14S/20E-07K01	M				48	29	24	--	0	196	--	26	64.0	--	--		239		
07/31/73	5050		69.0F	7.1	500	2.40	2.38	1.04		.00	3.21		.73	1.03		--		79	0.7	
0900	5050		20.5C	8.0	584	41	41	18			65		15	21						
	14S/20E-08H01	M				29	15	17	--	0	156	15	21	17.7	--	.1	293	137		
08/15/73	5200			7.8		1.48	1.25	.74		.00	2.56	.32	.60	.29		42.4	235	9	0.6	
	5802					43	36	21			68	8	16	8						
	14S/20E-08R01	M				24	13	28	--	0	143	7.4	21	25.7	--	.1	250	115		
08/15/73	5200			7.6		1.21	1.09	1.22		.00	2.34	.15	.60	.41		48.4	239	0	1.1	
	5802					34	31	35			67	4	17	12						
	14S/20E-09C01	M				24	14	16	--	0	140	13	17	17.7	--	.2	264	119		
08/15/73	5200			7.8		1.21	1.17	.70		.00	2.29	.28	.50	.29		43.2	216	5	0.6	
	5802					39	38	23			68	8	15	9						
	14S/20E-09L02	M				27	15	34	--	0	162	23	21	23.0	--	.2	280	132		
08/15/73	5200			7.7		1.39	1.25	1.48		.00	2.66	.49	.60	.37		50.8	275	0	1.3	
	5802					34	30	36			65	12	15	9						
	14S/20E-10M01	M				28	11	7.9	6.3	0	120	6.7	8.6	13.1	--	.2	217	118		
08/15/73	5200			7.5		1.40	.96	.34	.16	.00	1.97	.14	.24	.21		--	141	20	0.3	T
	5801					49	34	12	6		77	5	9	8						5
	14S/20E-10R01	M				22	13	23	--	0	159	8.5	10	8.0	--	.2	238	111		
08/15/73	5200			7.8		1.13	1.09	1.00		.00	2.61	.18	.30	.13		46.4	211	0	0.9	
	5802					35	34	31			81	6	9	4						
	14S/20E-11F01	M				38	22	25	--	0	204	20	21	32.3	--	.2	316	190		
08/15/73	5200			7.6		1.91	1.87	1.11		.00	3.34	.42	.60	.52		34.4	295	22	0.8	
	5802					39	38	23			68	9	12	11						
	14S/20E-14F01	M				33	18	23	--	0	186	5.3	17	30.0	--	.1	282	160		
08/15/73	5200			7.6		1.65	1.55	1.02		.00	3.05	.11	.50	.48		30.4	250	8	0.8	
	5802					39	37	24			74	3	12	12						
	14S/20E-16A01	M				34	20	26	--	0	217	7.0	21	23.9	--	.1	324	172		
08/15/73	5200			7.5		1.74	1.71	1.13		.00	3.56	.15	.60	.39		38.0	278	0	0.9	
	5802					38	37	25			76	3	13	8						
	14S/20E-18E01	M				47	35	67	--	0	234	--	44	100	--	--		263		
07/31/73	5050		69.0F	7.1	730	2.35	2.88	2.91		.00	3.84		1.24	1.61		--		70	1.8	
1130	5050		20.5C	8.0	818	29	35	36			57		19	24						
	14S/20E-19L01	M				30	33	36	--	0	277	--	30	14.0	--	--		210		X
07/31/73	5050		70.0F	7.1	696	1.50	2.71	1.57		.00	4.54		.85	.23		--		0	1.1	
1210	5050		21.1C	8.0	575	26	47	27			81		15	4						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER					REM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	
		CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	14S/20E-21R01	M																	
07/31/73	5050	80.0F	7.5	302	24	14	18	--	0	150	--	9.4	18.0	--	--		117		
1420	5050	26.6C	8.0	298	1.20	1.15	.78		.00	2.46		.27	.29		--		0	0.7	
					38	37	25			81		9	10						
	14S/20E-22L01	M																	
08/15/73	5200				13	7.6	19	--	0	95	9.9	7.1	10.2	--	.2	172	66		
	5802		7.8		.69	.63	.83		.00	1.56	.21	.20	.16		26.0	140	0	1.0	
					32	29	39			73	10	9	8						
	14S/20E-24D01	M																	
08/01/73	5050	73.0F	7.4	336	26	17	20	--	0	170	--	12	15.0	--	--		136		
1000	5050	22.8C	8.1	342	1.30	1.40	.87		.00	2.79		.34	.24		--		0	0.7	
					36	39	24			83		10	7						
	14S/20E-26L01	M																	
08/01/73	5050	68.0F	7.3	678	24	24	63	--	0	250	--	35	17.0	--	--		160		
1310	5050	20.0C	8.1	573	1.20	1.97	2.74		.00	4.10		.99	.27		--		0	2.2	
					20	33	46			76		18	5						
	14S/21F-06Q02	M																	
08/15/73	5200				24	14	33	--	0	159	14	10	15.1	--	.1	228	119		
	5802		7.7		1.21	1.17	1.46		.00	2.61	.30	.30	.24		27.6	218	0	1.3	
					32	30	38			76	9	9	7						
	14S/21F-07H02	M																	
08/15/73	5200				31	19	22	--	0	204	10	10	19.0	--	.2	274	160		
	5802		7.6		1.56	1.64	.98		.00	3.34	.21	.30	.31		29.2	243	0	0.8	
					37	39	23			80	5	7	7						
	14S/21E-07M01	M																	
08/01/73	5050	80.0F	7.4	396	32	24	20	--	0	212	--	7.1	16.0	--	--		181		
1200	5050	26.6C	8.2	398	1.60	1.97	.87		.00	3.47		.20	.26		--		5	0.7	
					36	44	20			88		5	7						
08/15/73	5200				41	26	16	--	0	223	26	14	21.7	--	.2	314	213		
	5802		7.6		2.08	2.18	.70		.00	3.65	.56	.40	.35		30.4	287	31	0.5	
					42	44	14			74	11	8	7						
	14S/21E-15P01	M																	
08/01/73	5050	72.0F	7.2	746	33	39	43	--	0	272	--	28	25.0	--	--		244		
0820	5050	22.2C	8.0	631	1.65	3.21	1.87		.00	4.46		.79	.40		--		20	1.2	
					25	48	28			79		14	7						
	14S/21E-20J01	M																	
07/31/73	5050	74.0F	7.3	442	34	24	25	--	0	226	--	17	13.0	--	--		186		
1030	5050	23.3C	8.0	454	1.70	1.97	1.09		.00	3.70		.48	.21		--		0	0.8	
					36	41	23			84		11	5						
	14S/21E-21J01	M																	
07/31/73	5050	77.0F	7.4	368	25	22	22	--	0	196	--	12	12.0	--	--		153		
1020	5050	25.0C	8.0	374	1.25	1.81	.96		.00	3.21		.34	.19		--		0	0.8	
					31	45	24			86		9	5						
	14S/21E-23K01	M																	
07/30/73	5050	74.0F	7.2	514	22	36	34	--	0	251	--	18	17.0	--	--		202		
1440	5050	23.3C	8.0	528	1.10	2.96	1.48		.00	4.11		.51	.27		--		0	1.0	
					20	53	27			84		10	6						
	14S/21E-24E01	M																	
07/30/73	5050	72.0F	7.0	896	33	41	69	--	0	272	--	29	42.0	--	--		253		
1425	5050	22.2C	7.9	777	1.65	3.37	3.00		.00	4.46		.82	.68		--		28	1.9	
					21	42	37			75		14	11						
	14S/22E-15Q01	M																	
07/26/73	5050	73.0F	7.4	116	5.3	6.6	9.7	--	0	59	--	1.6	2.4	--	--		40		
1310	5050	22.8C	7.7	114	.26	.54	.42		.00	.97		.05	.04		--		0	0.7	
					21	44	34			92		5	4						
	14S/22E-18M01	M																	
07/30/73	5050	72.0F	7.3	566	36	32	40	--	0	285	--	13	18.0	--	--		223		
0910	5050	22.2C	8.2	564	1.80	2.63	1.74		.00	4.67		.37	.29		--		0	1.2	
					29	43	28			88		7	5						
	14S/22E-20E01	M																	
04/19/73	5050	68 F	7.6	150	9.3	9.7	11	--	0	68	--	3.8	3.1	--	--		63		
1500	5050	20 C	7.5	142	.46	.80	.48		.00	1.11		.11	.05		--		8	0.6	
					26	46	28			87		9	4						
	14S/22E-21J01	M																	
07/30/73	5050	72.0F	7.3	322	20	19	18	--	0	127	--	22	12.0	--	--		130		
0800	5050	22.2C	7.8	329	1.00	1.56	.78		.00	2.08		.62	.19		--		24	0.7	
					30	47	23			72		21	7						
	14S/22E-23M01	M																	
07/26/73	5050	71.0F	7.4	168	11	9.4	12	--	0	84	--	4.1	4.4	--	--		66		
1030	5050	21.6C	7.7	172	.55	.77	.52		.00	1.38		.12	.07		--		0	0.6	
					30	42	28			88		8	4						
	14S/22E-24J01	M																	
07/26/73	5050	72.0F	7.1	107	9.4	3.3	9.7	--	0	56	--	2.8	2.2	--	--		37		
0845	5050	22.2C	7.3	106	.47	.27	.42		.00	.92		.08	.04		--		0	0.7	
					41	23	36			88		8	4						
	14S/22F-29A01	M																	
07/27/73	5050	72.0F	7.0	708	53	43	36	--	0	290	--	26	39.0	--	--		308		
0900	5050	22.2C	8.1	717	2.64	3.54	1.57		.00	4.75		.73	.63		--		72	0.9	
					34	46	20			78		12	10						

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

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	SAR	REM
					MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER					
									PERCENT REACTANCE VALUE										
	CENTRAL VALLEY SAN JOAQUIN VALLEY																		
	145/22E-34001 M																		
04/19/73	5050	68 F	7.0	170	14	7.5	7.6	--	0	64	--	3.6	17.0	--	--		66		
1430	5050	20 C	7.5	169	.70	.62	.33		.00	1.05		.10	.27		--		14	0.4	
					42	38	20			74		7	19						
	145/23E-03G01 M																		
07/25/73	5050	70.0F	6.8	189	17	8.6	11	--	0	96	--	5.9	5.1	--	--		78		
1445	5050	21.1C	7.7	189	.85	.71	.48		.00	1.57		.17	.08		--		0	0.5	
					42	35	24			86		9	4						
	145/23E-08001 M																		
07/25/73	5050	82.0F	7.4	180	13	10	9.4	--	0	85	--	3.4	4.2	--	--		76		
1520	5050	27.8C	7.4	180	.65	.82	.41		.00	1.39		.10	.07		--		4	0.5	
					35	44	22			89		6	4						
	145/23E-16B01 M																		
07/25/73	5050	80.0F	6.8	540	28	21	33	--	0	262	--	5.1	.4	--	--		155		X
1410	5050	26.6C	7.9	423	1.40	1.73	1.44		.00	4.29		.14	.01		--		0	1.1	
					31	38	32			97		3							
	145/23E-18J01 M																		
07/26/73	5050	72.0F	6.8	430	22	12	59	--	0	174	--	10	1.6	--	--		104		
0820	5050	22.2C	8.0	451	1.10	.99	2.57		.00	2.85		.28	.03		--		0	2.5	
					24	21	55			90		9	1						
	145/23E-23D01 M																		
07/25/73	5050	76.0F	7.0	460	44	21	16	--	0	130	--	11	33.0	--	--		197		
1200	5050	24.4C	7.7	456	2.20	1.73	.70		.00	2.13		.31	.53		--		90	0.5	
					48	37	15			72		10	18						
	145/23E-27C01 M																		
04/20/73	5050	60 F	7.1	270	46	2.7	11	--	0	90	--	5.2	19.0	--	--		126		
0720	5050	16 C	7.2	288	2.30	.22	.48		.00	1.48		.15	.31		--		52	0.4	
					77	7	16			76		8	16						
	145/25E-22N51 M																		
04/17/73	5050	69 F	7.0	380	27	7.9	26	--	0	154	--	10	20.0	--	--		110		
1030	5050	21 C	8.1	341	1.35	.65	1.13		.00	2.52		.28	.32		--		0	1.1	
					43	21	36			81		9	10						
	145/25E-23F01 M																		
04/17/73	5050	72 F	6.8	600	53	21	29	--	0	263	--	25	17.0	--	--		218		
1430	5050	22 C	7.4	566	2.64	1.73	1.26		.00	4.31		.71	.27		--		3	0.9	
					47	31	22			81		13	5						
	145/26E-19N51 M																		
04/17/73	5050	74 F	7.4	400	35	8.6	29	--	0	190	--	9.8	.0	--	--		123		
0845	5050	23 C	8.1	366	1.75	.71	1.26		.00	3.11		.28	.00		--		0	1.1	
					47	19	34			92		8							
	145/26E-30H01 M																		
04/16/73	5050	70 F	7.2	520	42	21	24	--	0	236	--	13	16.0	--	--		190		
1520	5050	21 C	7.4	480	2.10	1.73	1.04		.00	3.87		.37	.26		--		0	0.8	
					43	36	21			86		8	6						
	15S/12E-01B01 M																		
07/25/73	5050	80.0F	7.6	2000	100	88	435	--	0	207	--	151	6.9	--	--		612		X
0915	5050	26.6C	8.0	2910	4.99	7.24	18.92		.00	3.39		4.26	.11		--		442	7.7	
					16	23	61			44		55	1						
	15S/17E-01A03 M																		
08/30/73	5050	70.7F	7.2	870	67	28	88	--	0	306	--	97	39.0	--	--		283		
0745	5050	21.5C	7.5	951	3.34	2.30	3.83		.00	5.02		2.74	.63		--		31	2.3	
					35	24	40			60		33	8						
	15S/17E-02J01 M																		
08/30/73	5050	75.2F	7.7	860	75	11	89	--	0	186	--	134	10.0	--	--		233		
0945	5050	24.0C	7.8	899	3.74	.90	3.87		.00	3.05		3.78	.16		--		80	2.5	
					44	11	45			44		54	2						
	15S/17E-03D01 M																		
08/30/73	5050	73.4F	7.5	440	34	9.7	45	--	0	130	--	65	8.3	--	--		125		
0900	5050	23.0C	7.7	480	1.70	.80	1.96		.00	2.13		1.83	.13		--		19	1.8	
					38	18	44			52		45	3						
	15S/17E-04R01 M																		
07/24/73	5055			4140	309	43	449	--	0	130	--	1310	3.2	--	--		948		
	5050		7.4	4270	15.42	3.54	19.53		.00	2.13		36.94	.05		--		842	6.3	
					40	9	51			5		94							
	15S/17E-10A01 M																		
07/23/73	5055			2026	126	13	260	--	0	150	--	590	.6	--	--		367		
	5050		7.9	2090	6.29	1.07	11.31		.00	2.46		16.64	.01		--		245	5.9	
					34	6	61			13		87							
	15S/17E-10F01 M																		
07/24/73	5055			1636	7.3	1.9	354	--	0	390	--	335	.3	--	--		26		
	5050		8.3	1700	.36	.16	15.40		.00	6.39		9.45	.00		--		0	30.2	
					2	1	97			40		60							
	15S/17E-13J02 M																		
07/23/73	5055			1560	123	41	77	--	0	124	--	328	22.0	--	--		475		
	5050		7.6	1400	6.14	3.37	3.35		.00	2.03		9.25	.35		--		374	1.5	
					48	26	26			17		80	3						
	15S/17E-14G01 M																		
07/23/73	5055			340	2.8	.0	74	--	0	147	--	30	1.5	--	--		7		
	5050		8.2	350	.14	.00	3.22		.00	2.41		.85	.02		--		0	12.2	
					4		96			73		26	1						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	SAR	REM
		CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	15S/17E-14P02 M																		
07/23/73	5055			3340	210	28	406	--	0	119	--	988	7.8	--	--		638		
	5050		7.4	3430	10.48	2.30	17.66		.00	1.95		27.86	.13		--		542	7.0	
					34	8	58			7		93							
	15S/17E-14R01 M																		
07/23/73	5055			2340	178	24	359	--	0	107	--	875	8.0	--	--		543		
	5050		7.5	2900	8.88	1.97	15.62		.00	1.75		24.68	.13		--		455	6.7	
					34	7	59			7		93							
	15S/17E-15R02 M																		
07/23/73	5055			1338	36	3.9	256	--	0	347	--	230	11.0	--	--		106		
	5050		8.3	1350	1.80	.32	11.14		.00	5.69		6.49	.18		--		0	10.8	
					14	2	84			46		53	1						
	15S/17E-24C01 M																		
07/23/73	5055			824	16	1.2	151	--	0	132	--	186	3.4	--	--		45		
	5050		8.2	844	.80	.10	6.57		.00	2.16		5.25	.05		--		0	9.8	
					11	1	88			29		70	1						
	15S/17E-25R03 M																		
08/30/73	5050	77.0F	8.1	410	6.4	4.1	91	--	0	159	--	52	3.2	--	--		33		
1430	5050	25.0C	7.8	453	.32	.34	3.96		.00	2.61		1.47	.05		--		0	6.9	
					7	7	86			63		36	1						
	15S/18E-07R01 M																		
08/30/73	5050	76.1F	7.3	480	44	14	48	--	0	203	--	57	13.0	--	--		167		
1135	5050	24.5C	7.7	572	2.20	1.15	2.09		.00	3.33		1.61	.21		--		1	1.6	
					40	21	38			65		31	4						
	15S/18E-08A02 M																		
08/30/73	5050	77.9F	7.4	430	27	10	48	--	0	158	--	50	7.0	--	--		110		
1210	5050	25.5C	7.8	453	1.35	.82	2.09		.00	2.59		1.41	.11		--		0	2.0	
					32	19	49			63		34	3						
	15S/18F-08J01 M																		
08/30/73	5050	77.0F	7.2	390	33	17	28	--	0	153	--	41	15.0	--	--		152		
1300	5050	25.0C	7.7	430	1.65	1.40	1.22		.00	2.51		1.16	.24		--		27	1.0	
					39	33	29			64		30	6						
	15S/18F-18C03 M																		
08/30/73	5050	73.4F	7.2	800	80	33	43	--	0	210	--	134	17.0	--	--		336		
0815	5050	23.0C	7.7	874	3.99	2.71	1.87		.00	3.44		3.78	.27		--		163	1.0	
					47	32	22			46		50	4						
	15S/22E-21P01 M																		
04/19/73	5050	70 F	7.2	270	22	12	24	--	0	140	--	5.6	18.0	--	--		103		
1320	5050	21 C	8.1	292	1.10	.99	1.04		.00	2.29		.16	.29		--		0	1.0	
					35	32	33			84		6	11						
	15S/22E-31A01 M																		
05/23/73	5701				36	1.0	19	3.3	1.4	126	8.0	15	13.0	.02	.1	180	96		
	5701		8.2	270	1.80	.08	.83	.08	.05	2.07	.17	.42	.21		21.0	180	0	0.9	
					65	3	30	3	2	71	6	14	7						
	15S/22E-32L01 M																		
06/18/73	5701				15	.0	17	1.3	1.1	66	4.0	11	6.0	--	.1	106	40		
	5701		8.4	157	.75	.00	.74	.03	.04	1.08	.08	.31	.10		17.0	105	0	1.2	
					49		49	2	2	67	5	19	6						5
	15S/23E-02Q01 M																		
04/20/73	5050	65 F	7.3	440	44	18	23	--	0	223	--	9.1	15.0	--	--		183		
0850	5050	18 C	8.2	451	2.20	1.48	1.00		.00	3.65		.26	.24		--		2	0.7	
					47	32	21			88		6	6						
	15S/23E-23A02 M																		
04/19/73	5050	60 F	7.1	450	44	21	26	--	0	251	--	7.5	21.0	--	--		197		
1040	5050	16 C	7.7	497	2.20	1.73	1.13		.00	4.11		.21	.34		--		0	0.8	
					43	34	22			88		5	7						
	15S/23E-33C01 M																		
04/19/73	5050	69 F	7.4	400	39	15	30	--	0	196	--	26	20.0	--	--		161		
1215	5050	21 C	7.9	463	1.95	1.23	1.31		.00	3.21		.73	.32		--		0	1.0	
					43	27	29			75		17	8						
	15S/24E-10K01 M																		
04/20/73	5050	66 F	7.2	520	52	23	36	--	0	248	--	20	36.0	--	--		226		
0820	5050	19 C	7.7	613	2.59	1.89	1.57		.00	4.06		.56	.58		--		21	1.0	
					43	31	26			78		11	11						
	15S/24F-20N01 M																		
04/19/73	5050	69 F	7.2	500	50	19	38	--	0	232	--	20	34.0	--	--		205		
1150	5050	21 C	7.8	574	2.50	1.56	1.65		.00	3.80		.56	.55		--		13	1.2	
					44	27	29			77		11	11						
	15S/24E-23Q01 M																		
04/19/73	5050	64 F	7.0	940	84	34	56	--	0	331	--	45	32.0	--	--		348		
0800	5050	18 C	7.8	921	4.19	2.80	2.44		.00	5.43		1.27	.52		--		78	1.3	
					44	30	26			75		18	7						
	15S/24E-35G01 M																		
04/19/73	5050	68 F	7.2	660	53	33	41	--	0	222	--	67	25.0	--	--		268		
0910	5050	20 C	7.8	688	2.64	2.71	1.78		.00	3.64		1.89	.40		--		86	1.1	
					37	38	25			61		32	7						
	15S/25E-16F01 M																		
04/16/73	5050	77 F	7.0	520	43	16	24	--	0	139	--	25	43.0	--	--		174		
1330	5050	25 C	7.4	489	2.15	1.32	1.04		.00	2.28		.71	.69		--		60	0.8	
					48	29	23			62		19	19						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F / SIO2	TDS SUM	TM NCM	SAR	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY														
	15S/25E-16Q01	M																	
04/16/73	5050	74 F	7.2	680	61	18	44	--	0	259	--	60	5.9	--	--		227		
1300	5050	23 C	7.6	642	3.04	1.48	1.91		.00	4.25		1.69	.10		--		14	1.3	
					47	23	30			70		28	2						
	15S/25E-29N02	M																	
06/06/73	5050	68 F	7.3	320	32	12	25	1.7	0	147	15	18	27.0	.10	--	250	130		
0615	5050	20 C	7.7	374	1.60	.99	1.09	.04	.00	2.41	.31	.51	.44		--	203	9	1.0	
					43	27	29	1		66	8	14	12						
	15S/25E-32N01	M																	
06/06/73	5050	69 F	7.1	470	39	21	28	1.9	0	272	22	19	15.0	.00	--	343	219		
0650	5050	21 C	7.8	543	1.95	1.73	1.22	.05	.00	4.46	.46	.54	.24		--	280	0	0.9	S
					39	35	25	1		78	8	9	4						
	16S/22E-05C01	M																	
06/18/73	5701				29	.0	16	2.1	.8	89	5.0	20	10.0	.00	.2	155	74		
	5701		8.1	235	1.45	.00	.70	.05	.03	1.46	.10	.56	.16		27.0	154	0	0.8	
					66		32	2	1	63	4	24	7						
	16S/22E-05C02	M																	
05/23/73	5701				22	1.0	18	2.6	1.4	80	3.0	17	6.0	--	.1	130	57		
	5701		8.4	192	1.10	.08	.78	.07	.05	1.31	.06	.48	.10		22.0	132	0	1.0	
					54	4	38	3	3	66	3	24	5						
	16S/22E-05E01	M																	
07/17/73	5701				31	2.0	18	2.4	.6	104	7.0	21	10.0	--	.2	173	86		
	5701		7.9	262	1.55	.16	.78	.06	.02	1.70	.15	.59	.16		30.0	173	0	0.8	
					61	6	31	2	1	65	6	23	6						
	16S/22E-05E02	M																	
08/21/73	5701				16	3.0	18	1.7	.6	72	4.0	17	4.0	--	.1	121	52		
	5701		8.1	178	.80	.25	.78	.04	.02	1.18	.08	.48	.06		21.0	121	0	1.1	
					43	13	42	2	1	65	4	26	3						
	16S/22E-05M01	M																	
05/21/73	5701				31	4.0	20	3.2	1.2	108	7.0	24	11.0	--	.1	178	93		
	5701		8.2	275	1.55	.33	.87	.08	.04	1.77	.15	.68	.18		25.0	180	4	0.9	
					55	12	31	3	1	63	5	24	6						
	16S/22E-06G01	M																	
07/17/73	5701				37	1.0	26	2.6	.6	118	12	20	23.0	--	.1	203	96		
	5701		7.9	317	1.85	.08	1.13	.07	.02	1.93	.25	.56	.37		23.0	203	0	1.2	
					59	3	36	2	1	62	8	18	12						
	16S/22E-06K01	M																	
06/18/73	5701				18	1.0	20	1.6	1.0	73	6.0	15	11.0	--	.2	130	52		
	5701		8.3	200	.90	.08	.87	.04	.03	1.20	.12	.42	.18		19.0	128	0	1.2	
					48	4	46	2	2	62	6	22	9						
	16S/22E-06Q01	M																	
07/17/73	5701				26	2.0	20	2.2	.7	94	6.0	20	11.0	--	.1	158	74		
	5701		8.1	247	1.30	.16	.87	.06	.02	1.54	.12	.56	.18		24.0	158	0	1.0	
					54	7	36	3	1	64	5	23	7						
	16S/22E-07A01	M																	
08/21/73	5701				43	7.0	23	2.9	.6	145	10	35	14.0	--	.1	237	138		
	5701		7.8	380	2.15	.58	1.00	.07	.02	2.38	.21	.99	.23		28.0	235	17	0.9	
					57	15	26	2	1	62	5	26	6						
	16S/22E-07C02	M																	
08/21/73	5701				10	1.0	17	1.3	.9	57	3.0	10	5.0	--	.1	96	30		E
	5701		8.4	134	.50	.08	.74	.03	.03	.93	.06	.28	.08		20.0	96	0	1.4	
					37	6	55	2	2	67	4	20	6						
	16S/25E-05D01	M																	
06/06/73	5050	73 F	7.2	670	56	35	35	2.5	0	288	52	20	98.0	.00	--	544	329		
0730	5050	23 C	8.3	787	2.79	2.88	1.52	.06	.00	4.72	1.08	.56	1.58		--	440	48	0.9	S
					38	40	21	1		59	14	7	20						
	16S/25E-05G01	M																	
06/06/73	5050	74 F	7.0	700	54	24	31	2.4	0	224	45	17	58.0	.20	--	416	233		E
0920	5050	23 C	7.8	594	2.69	1.97	1.35	.06	.00	3.67	.94	.48	.94		--	342	50	0.9	
					44	32	22	1		61	16	8	16						
	16S/25E-05L01	M																	
06/06/73	5050	72 F	7.2	500	53	24	30	2.9	0	273	15	27	32.0	.00	--	380	230		
0900	5050	22 C	7.9	582	2.64	1.97	1.31	.07	.00	4.47	.31	.76	.52		--	318	7	0.9	
					44	33	22	1		74	5	13	9						
	16S/25E-06J01	M																	
06/06/73	5050	76 F	7.4	450	40	20	30	2.5	0	189	24	18	60.0	.20	--	347	184		
0750	5050	24 C	7.8	507	2.00	1.64	1.31	.06	.00	3.10	.50	.51	.97		--	288	27	1.0	
					40	33	26	1		61	10	10	19						
	16S/25E-06L01	M																	
06/06/73	5050	70 F	7.2	460	51	21	24	1.8	0	209	31	24	38.0	.10	--	354	214		
0950	5050	21 C	7.9	528	2.54	1.73	1.04	.05	.00	3.43	.65	.68	.61		--	294	42	0.7	
					47	32	19	1		64	12	13	11						
	16S/25E-07D01	M																	
06/06/73	5050	71 F	7.2	1000	41	17	24	1.8	0	185	39	13	37.0	.00	--	314	173		X
1000	5050	22 C	7.8	449	2.05	1.40	1.04	.05	.00	3.03	.81	.37	.60		--	264	21	0.8	S
					45	31	23	1		63	17	8	12						
	16S/25E-08D02	M																	
06/06/73	5050	70 F	7.3	500	52	23	32	2.9	0	260	29	9.9	56.0	.10	--	390	226		
0820	5050	21 C	7.9	579	2.59	1.89	1.39	.07	.00	4.26	.60	.28	.90		--	333	11	0.9	
					44	32	23	1		71	10	5	15						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
			CENTRAL VALLEY SAN JOAQUIN VALLEY																
	16S/25E-09Q02	M																	
06/06/73	5050	82 F	7.2	620	72	32	40	3.2	0	383	28	22	32.0	.10	--	471	314		
0840	5050	28 C	8.0	739	3.59	2.63	1.74	.08	.00	6.28	.58	.62	.52		--	418	0	1.0	
					45	33	22	1		79	7	8	7						
	17S/20E-36R02	M																	
10/16/72	5129				6.6	2.1	5.6	--	0	31	--	4.6	1.0	--	--		25		
	5050		7.3	76	.33	.17	.24		.00	.51		.13	.02		--		0	0.5	
					45	23	32			77		20	3						
	18S/21E-13R01	M																	
10/18/72	5702				4.5	.0	55	--	15	79	6.2	24	.0	--	.5	178	11		
	5802		8.6		.22	.00	2.39		.50	1.29	.13	.70	.00		21.2	166	0	7.1	
					8		92		19	49	5	27							
	18S/24E-25L01	M																	
05/23/73	5701				46	4.0	16	1.5	1.1	164	9.0	14	9.0	.04	.0	205	134		
	5701		8.0	316	2.30	.33	.70	.04	.04	2.69	.19	.39	.15		23.0	204	0	0.6	
					68	10	21	1	1	78	5	11	4						
	18S/24E-27R02	M																	
05/17/73	5701				20	1.0	18	1.4	.5	97	4.0	5.0	2.0	--	.1	114	50		
	5701		7.9	179	1.00	.08	.78	.04	.02	1.59	.08	.14	.03		17.0	117	0	1.1	
					53	4	41	2	1	85	4	8	2						
	18S/24E-35C02	M																	
04/12/73	5701				63	6.0	16	1.3	.6	206	9.0	13	21.0	--	.1	261	182		
	5701		7.8	376	3.14	.49	.70	.03	.02	3.38	.19	.37	.34		28.0	259	12	0.5	
					72	11	16	1		79	4	9	8						
	18S/24E-35C03	M																	
09/06/73	5701				46	13	12	1.2	.4	187	8.0	15	18.0	--	.1	234	168		
	5701		7.5	382	2.30	1.07	.52	.03	.01	3.06	.17	.42	.29		29.0	235	15	0.4	
					59	27	13	1		77	4	11	7						
	18S/24E-35N01	M																	
02/28/73	5701				22	2.0	16	1.5	.9	96	4.0	9.0	4.0	--	.1	120	60		
	5701		8.2	183	1.10	.16	.70	.04	.03	1.57	.08	.25	.06		12.0	119	0	0.9	
					55	8	35	2	2	79	4	13	3						
	18S/24E-36C01	M																	
06/15/73	5701				21	.0	16	1.3	.8	86	3.0	9.0	3.0	--	.1	113	52		
	5701		8.2	173	1.05	.00	.70	.03	.03	1.41	.06	.25	.05		17.0	113	0	1.0	
					59		39	2	2	78	3	14	3						
	18S/24E-36E01	M																	
07/17/73	5701				30	1.0	16	1.3	.6	106	6.0	12	6.0	--	.1	144	80		
	5701		7.9	228	1.50	.08	.70	.03	.02	1.74	.12	.34	.10		19.0	144	0	0.8	
					65	3	30	1	1	75	5	15	4						
	18S/24E-36K01	M																	
07/73/73	5701				29	1.0	15	1.3	.6	104	5.0	9.0	5.0	.00	.1	135	76		
	5701		7.9	213	1.45	.08	.65	.03	.02	1.70	.10	.25	.08		19.0	136	0	0.7	
					66	4	29	1	1	79	5	12	4						
	18S/24E-36Q01	M																	
06/15/73	5701				42	3.0	13	1.0	.6	148	7.0	9.0	8.0	--	.1	178	120		
	5701		7.8	283	2.10	.25	.57	.03	.02	2.43	.15	.25	.13		22.0	178	0	0.5	
					71	8	19	1	1	82	5	8	4						
	18S/25E-14N02	M																	
02/25/73	5701				33	5.0	8.0	1.0	.3	126	5.0	5.0	6.0	--	.1	160	102		E
	5701		7.6	227	1.65	.41	.35	.03	.01	2.07	.10	.14	.10		34.0	159	0	0.3	
					68	17	14	1		86	4	6	4						
04/12/73	5701				36	2.0	8.0	1.0	.3	119	6.0	5.0	4.0	--	.1	154	96		E
	5701		7.4	212	1.80	.16	.35	.03	.01	1.95	.12	.14	.06		32.0	153	0	0.4	
					77	7	15	1		86	5	6	3						
	18S/25E-19N01	M																	
05/23/73	5701				24	2.0	14	1.4	1.2	103	3.0	5.0	3.0	--	.0	121	68		
	5701		8.2	178	1.20	.16	.61	.04	.04	1.69	.06	.14	.05		18.0	122	0	0.7	
					60	8	30	2	2	85	3	7	3						
	18S/25E-19Q01	M																	
07/17/73	5701				24	1.0	11	1.1	.7	98	3.0	5.0	1.0	--	.1	114	66		
	5701		8.1	172	1.20	.08	.48	.03	.02	1.61	.06	.14	.02		18.0	113	0	0.6	
					67	4	27	2	1	87	3	8	1						
	18S/25E-20E01	M																	
02/21/73	5701				37	7.0	12	1.5	.9	157	5.0	7.0	6.0	--	.1	178	120		
	5701		7.9	282	1.85	.58	.52	.04	.03	2.57	.10	.20	.10		23.0	177	0	0.5	
					62	19	17	1	1	86	3	7	3						
	18S/25E-27N01	M																	
01/23/73	5701				23	1.0	13	1.7	.6	99	4.0	6.0	2.0	--	.1	120	64		
	5701		8.0	181	1.15	.08	.57	.04	.02	1.62	.08	.17	.03		19.0	119	0	0.7	
					63	4	31	2	1	84	4	9	2						
	18S/25E-27P01	M																	
06/15/73	5701				18	.0	17	1.3	.7	86	3.0	6.0	3.0	--	.2	109	46		
	5701		8.1	163	.90	.00	.74	.03	.02	1.41	.06	.17	.05		17.0	108	0	1.1	
					54		44	2	1	82	4	10	3						
	18S/25E-28D01	M																	
05/23/73	5701				25	2.0	11	1.5	1.1	98	4.0	6.0	3.0	--	.0	120	70		
	5701		8.2	175	1.25	.16	.48	.04	.04	1.61	.08	.17	.05		20.0	122	0	0.6	
					65	8	25	2	2	83	4	9	3						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER					REM
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F / SIO2	TDS SUM	TH NCH	SAR	
		CENTRAL VALLEY SAN JOAQUIN VALLEY																		
	18S/25E-28L01	M																		
01/23/73	S701					44	7.0	13	1.4	.3	163	11	10	10.0	--	.2	207	138		
	S701			7.5	316	2.20	.58	.57	.04	.01	2.67	.23	.28	.16		29.0	206	5	0.5	
						65	17	17	1		80	7	8	5						
	18S/25E-29B01	M																		
03/20/73	S701					26	2.0	13	1.4	.3	107	4.0	7.0	2.0	--	.1	128	74		
	S701			7.7	192	1.30	.16	.57	.04	.01	1.75	.08	.20	.03		19.0	127	0	0.7	
						63	8	28	2		85	4	10	1						
	18S/25E-29C01	M																		
03/20/73	S701					21	2.0	9.0	1.0	.3	82	4.0	6.0	3.0	--	.2	108	62		E
	S701			7.6	152	1.05	.16	.39	.03	.01	1.34	.08	.17	.05		20.0	107	0	0.5	
						64	10	24	2	1	81	5	10	3						
	18S/25E-29Q01	M																		
05/23/73	S701					55	7.0	14	1.4	.8	182	15	11	14.0	--	.1	233	165		
	S701			7.8	356	2.74	.58	.61	.04	.03	2.98	.31	.31	.23		28.0	236	16	0.5	
						69	15	15	1	1	77	8	8	6						
	18S/25E-29P01	M																		
02/25/73	S701					35	1.0	12	1.5	1.2	127	4.0	7.0	6.0	.02	.1	153	94		
	S701			8.2	220	1.75	.08	.52	.04	.04	2.08	.08	.20	.10		22.0	152	0	0.5	
						73	3	22	2	2	83	3	8	4						
	18S/25E-30F01	M																		
03/20/73	S701					21	2.0	14	1.5	.9	98	3.0	6.0	2.0	--	.1	118	52		
	S701			7.8	174	1.05	.16	.61	.04	.03	1.61	.06	.17	.03		18.0	117	0	0.8	
						56	9	33	2	2	85	3	9	2						
	18S/25E-30H01	M																		
07/17/73	S701					46	3.0	13	1.2	.8	147	10	10	9.0	--	.1	190	126		
	S701			7.9	301	2.30	.25	.57	.03	.03	2.41	.21	.28	.15		25.0	190	6	0.5	
						73	8	18	1	1	78	7	9	5						
	18S/25E-30H02	M																		
07/17/73	S701					46	3.0	14	1.2	.5	148	10	11	11.0	--	.1	193	126		
	S701			7.7	310	2.30	.25	.61	.03	.02	2.43	.21	.31	.18		25.0	194	5	0.5	
						72	8	19	1	1	77	7	10	6						
	18S/25E-30N01	M																		
08/21/73	S701					24	2.0	14	1.3	.8	98	4.0	9.0	3.0	--	.1	125	70		
	S701			8.1	187	1.20	.16	.61	.03	.03	1.61	.08	.25	.05		18.0	124	0	0.7	
						60	8	31	2	1	80	4	12	2						
	18S/25E-30P01	M																		
08/21/73	S701					50	5.0	15	1.4	.6	150	13	23	12.0	--	.1	219	146		
	S701			7.8	349	2.50	.41	.65	.04	.02	2.46	.27	.65	.19		25.0	219	22	0.5	
						69	11	18	1	1	69	8	18	5						
	18S/25E-30R02	M																		
05/23/73	S701					40	3.0	15	1.5	.9	128	12	13	9.0	--	.0	175	108		
	S701			8.0	273	2.00	.25	.65	.04	.03	2.10	.25	.37	.15		20.0	177	6	0.6	
						68	9	22	1	1	72	9	13	5						
	18S/25E-31B01	M																		
04/12/73	S701					30	2.0	13	1.5	.6	113	7.0	9.0	4.0	--	.1	144	84		
	S701			8.0	215	1.50	.16	.57	.04	.02	1.85	.15	.25	.06		20.0	143	0	0.6	
						66	7	25	2	1	79	6	11	3						
	18S/25E-31B03	M																		
03/20/73	S701					34	2.0	14	1.6	.3	121	7.0	12	6.0	--	.1	158	94		
	S701			7.6	237	1.70	.16	.61	.04	.01	1.98	.15	.34	.10		20.0	156	0	0.6	
						68	6	24	2		77	6	13	4						
	18S/25E-31E01	M																		
09/06/73	S701					32	1.0	13	1.4	.5	109	5.0	12	7.0	--	.1	146	86		
	S701			7.8	226	1.60	.08	.57	.04	.02	1.79	.10	.34	.11		20.0	145	0	0.6	
						70	3	25	2	1	76	4	14	5						
	18S/25E-31K01	M																		
08/21/73	S701					24	2.0	13	1.3	.8	98	3.0	7.0	2.0	--	.1	120	68		
	S701			8.1	179	1.20	.16	.57	.03	.03	1.61	.06	.20	.03		19.0	120	0	0.7	
						61	8	29	2	2	83	3	10	2						
	18S/25E-31R01	M																		
02/21/73	S701					29	2.0	15	1.8	.9	113	5.0	10	1.0	--	.1	140	80		
	S701			8.1	216	1.45	.16	.65	.05	.03	1.85	.10	.28	.02		19.0	139	0	0.7	
						63	7	28	2	1	81	4	12	1						
	18S/25E-32E01	M																		
01/23/73	S701					34	3.0	11	1.5	.6	126	6.0	8.0	6.0	--	.1	156	96		
	S701			7.9	236	1.70	.25	.48	.04	.02	2.07	.12	.23	.10		23.0	155	0	0.5	
						69	10	19	2	1	81	5	9	4						
	18S/25E-32E02	M																		
01/23/73	S701					34	3.0	11	1.5	.6	123	5.0	7.0	4.0	--	.1	151	98		
	S701			7.9	232	1.70	.25	.48	.04	.02	2.02	.10	.20	.06		23.0	150	0	0.5	
						69	10	19	2	1	84	4	8	3						
	18S/25E-32G01	M																		
09/06/73	S701					37	5.0	10	1.0	.1	127	9.0	10	13.0	--	.1	178	112		
	S701			7.1	262	1.85	.41	.44	.03	.00	2.08	.19	.28	.21		30.0	178	9	0.4	
						68	15	16	1		75	7	10	8						
	18S/25E-32K01	M																		
08/21/73	S701					25	4.0	14	1.0	.3	107	5.0	8.0	7.0	--	.1	142	78		
	S701			7.7	211	1.25	.33	.61	.03	.01	1.75	.10	.23	.11		25.0	142	0	0.7	
						56	15	27	1		80	5	10	5						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER B	F	SIO2	TDS SUM	TH NCH	SAR	REM
		CENTRAL VALLEY SAN JOAQUIN VALLEY																			
		19S/20E-10D01	M																		
10/07/72	5129					46	20	138	--	0	512	--	32	.9	--	--			198		
	5050			8.0	913	2.30	1.64	6.00		.00	8.39		.90	.01		--			0	4.3	
						23	16	60			90		10								
		19S/21E-02F01	M																		
10/25/72	5129					26	9.0	54	--	0	219	--	15	4.1	--	--			102		
	5050			8.2	430	1.30	.74	2.35		.00	3.59		.42	.07		--			0	2.3	
						30	17	54			88		10	2							
		19S/24E-01G01	M																		
04/14/73	5701					53	4.0	16	1.3	.9	157	12	21	14.0	--	.1	224		148		
	5701			7.9	339	2.64	.33	.70	.03	.03	2.57	.25	.59	.23		23.0	222		19	0.6	
						71	9	19	1	1	70	7	16	6							
		19S/24E-02H02	M																		
02/21/73	5701					37	2.0	16	1.2	1.5	129	7.0	11	7.0	--	.1	168		102		
	5701			8.0	267	1.85	.16	.70	.03	.05	2.11	.15	.31	.11		21.0	167		0	0.7	
						68	6	26	1	2	77	5	11	4							
		19S/25E-05B01	M																		
06/15/73	5701					30	1.0	13	1.4	.7	106	5.0	7.0	5.0	--	.1	134		78		
	5701			8.0	203	1.50	.08	.57	.04	.02	1.74	.10	.20	.08		20.0	135		0	0.6	
						68	4	26	2	1	81	5	9	4							
		19S/25E-06E01	M																		
08/21/73	5701					21	1.0	16	1.3	.6	84	5.0	11	4.0	--	.1	118		56		
	5701			8.0	176	1.05	.08	.70	.03	.02	1.38	.10	.31	.06		18.0	119		0	0.9	
						56	4	38	2	1	74	5	17	3							
		19S/25E-06M01	M																		
02/25/73	5701					38	3.0	15	1.6	.9	106	4.0	35	5.0	--	.1	175		108		
	5701			8.1	290	1.90	.25	.65	.04	.03	1.74	.08	.99	.08		19.0	174		19	0.6	
						67	9	23	1	1	60	3	34	3							
		19S/25E-07A01	M																		
06/15/73	5701					74	9.0	17	1.7	.6	218	22	32	15.0	--	.1	309		224		
	5701			7.6	495	3.69	.74	.74	.04	.02	3.57	.46	.90	.24		30.0	308		42	0.5	
						71	14	14	1		69	9	17	5							
		19S/26E-22D01	M																		
09/19/73	5050		71.6F	7.2	780	64	35	50	--	0	310	--	68	18.0	--	--			303		
0845	5050		22.0C	7.8	796	3.19	2.88	2.18		.00	5.08		1.92	.29		--			50	1.2	
						39	35	26			70		26	4							
		19S/26E-22P01	M																		
09/19/73	5050		69.8F	7.2	670	90	34	47	--	0	403	--	66	19.0	--	--			367		X
0920	5050		21.0C	8.1	886	4.49	2.80	2.04		.00	6.61		1.86	.31		--			34	1.1	
						48	30	22			75		21	4							
		19S/26E-23L01	M																		
09/19/73	5050		71.6F	7.4	650	48	33	51	--	0	292	--	42	18.0	--	--			256		
1045	5050		22.0C	7.9	701	2.40	2.71	2.22		.00	4.79		1.18	.29		--			16	1.4	
						33	37	30			77		19	5							
		19S/26E-26J01	M																		
09/19/73	5050		73.4F	7.5	1240	45	59	156	--	0	501	--	204	15.0	--	--			356		
1230	5050		23.0C	8.2	1320	2.25	4.85	6.79		.00	8.21		5.75	.24		--			0	3.6	
						16	35	49			58		40	2							
		19S/26E-26M01	M																		
09/19/73	5050		80.6F	8.0	880	34	34	94	--	0	228	--	96	21.0	--	--			227		
1140	5050		27.0C	8.0	864	1.70	2.80	4.09		.00	3.74		2.71	.34		--			38	2.7	
						20	33	48			55		40	5							
		19S/26E-28J01	M																		
09/18/73	5050		71.6F	7.2	700	59	28	50	--	0	275	--	63	17.0	--	--			262		
1040	5050		22.0C	7.8	726	2.94	2.30	2.18		.00	4.51		1.78	.27		--			37	1.3	
						40	31	29			69		27	4							
		19S/26E-29A01	M																		
09/18/73	5050		69.8F	7.2	930	70	36	68	--	0	349	--	75	20.0	--	--			321		
0945	5050		21.0C	7.8	930	3.49	2.96	2.96		.00	5.72		2.12	.32		--			37	1.6	
						37	31	31			70		26	4							
		19S/26E-32M01	M																		
09/17/73	5050		70.7F	7.9	350	32	12	38	--	0	168	--	25	20.0	--	--			129		
0915	5050		21.5C	8.0	418	1.60	.99	1.65		.00	2.75		.71	.32		--			0	1.5	
						38	23	39			73		19	8							
		19S/26E-34K03	M																		
11/27/72	5050		53.6F	8.1	1200	38	39	123	--	0	261	--	174	22.0	.10	--			256		
1200	5050		12.0C	8.0	1090	1.90	3.21	5.35		.00	4.28		4.91	.35		--			42	3.3	
						18	31	51			45		51	4							
		19S/26E-34L01	M																		
11/27/72	5050		57.2F	8.1	1400	79	85	170	--	0	263	--	435	27.0	.20	--			546		X
1300	5050		14.0C	7.8	1920	3.94	6.99	7.40		.00	4.31		12.27	.44		--			331	3.2	
						21	38	40			25		72	3							
09/18/73	5050		75.2F	8.3	1740	88	81	192	--	0	250	--	428	27.0	--	--			553		
1400	5050		24.0C	7.9	1950	4.39	6.66	8.35		.00	4.10		12.07	.44		--			348	3.6	
						23	34	43			25		73	3							
		19S/26E-34R01	M																		
09/17/73	5050		77.9F	8.0	1220	63	50	117	--	0	250	--	268	36.0	--	--			363		
1330	5050		25.5C	8.0	1250	3.14	4.11	5.09		.00	4.10		7.56	.58		--			158	2.7	
						25	33	41			33		62	5							

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	SAR	REM
					MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER					
									PERCENT REACTANCE VALUE										
	CENTRAL VALLEY SAN JOAQUIN VALLEY																		
	19S/26E-34R02 M																		
09/17/73	5050	73.4F	7.5	990	56	40	87	--	0	222	--	184	36.0	--	--		304		
1345	5050	23.0C	8.2	1040	2.79	3.29	3.78		.00	3.64		5.19	.58		--		122	2.2	
					28	33	38			39		55	6						
	19S/26E-36F02 M																		
09/19/73	5050	73.4F	7.7	910	60	34	85	--	0	331	--	82	54.0	--	--		291		
1300	5050	23.0C	8.3	961	2.99	2.80	3.70		.00	5.43		2.31	.87		--		18	2.2	
					32	30	39			63		27	10						
	20S/15E-14N03 M																		
05/23/73	5050	80.0F	7.9	500	27	15	63	--	0	103	--	81	1.8	.20	--		130		
1115	5050	26.6C	7.9	578	1.35	1.23	2.74		.00	1.69		2.28	.03		--		45	2.4	
					25	23	52			42		57	1						
	20S/15E-16A01 M																		
05/23/73	5050	81.0F	7.7	1850	69	110	242	--	0	170	--	145	8.8	2.60	--		625		
1310	5050	27.2C	8.1	2100	3.44	9.05	10.53		.00	2.79		4.09	.14		--		485	4.2	
					15	39	46			40		58	2						
	20S/15E-23D01 M																		
05/23/73	5050	82.0F	7.6	1800	78	91	231	--	0	144	--	139	5.8	1.70	--		569		
1105	5050	27.8C	8.1	2020	3.89	7.48	10.05		.00	2.36		3.92	.09		--		451	4.2	
					18	35	47			37		62	1						
	20S/15E-26D03 M																		
05/23/73	5050	75.0F	7.4	1800	70	113	200	--	0	216	--	112	18.0	1.40	--		639		
1045	5050	23.9C	8.1	1980	3.49	9.29	8.70		.00	3.54		3.16	.29		--		462	3.4	
					16	43	41			51		45	4						
	20S/15E-26M02 M																		
05/23/73	5050	74.0F	7.4	2100	83	130	238	--	0	229	--	154	99.0	1.30	--		744		
1040	5050	23.3C	8.1	2300	4.14	10.69	10.35		.00	3.75		4.34	1.60		--		554	3.8	
					16	42	41			39		45	17						
	20S/15E-28D01 M																		
05/23/73	5050	78.0F	7.4	2100	90	116	280	--	0	207	--	185	10.0	1.60	--		702		
1150	5050	25.5C	8.0	2380	4.49	9.54	12.18		.00	3.39		5.22	.16		--		532	4.6	
					17	36	46			39		60	2						
	20S/15E-34D01 M																		
05/23/73	5050	72.0F	7.3	2400	116	138	310	--	0	198	--	147	9.3	1.80	--		859		
0800	5050	22.2C	7.9	2640	5.79	11.35	13.49		.00	3.25		4.15	.15		--		695	4.6	
					19	37	44			43		55	2						
	20S/15E-34N02 M																		
05/22/73	5050	74.0F	7.4	2300	137	101	323	--	0	207	--	130	10.0	2.20	--		757		
1300	5050	23.3C	8.0	2580	6.84	8.31	14.05		.00	3.39		3.67	.16		--		588	5.1	
					23	28	48			47		51	2						
	20S/15E-35D01 M																		
05/23/73	5050	69.0F	7.3	2650	137	182	334	--	0	135	--	359	32.0	1.70	--		1090		
0825	5050	20.5C	8.0	3170	6.84	14.97	14.53		.00	2.21		10.12	.52		--		981	4.4	
					19	41	40			17		79	4						
	20S/16E-30H01 M																		
05/23/73	5050	80.0F	7.8	2600	145	132	366	--	0	76	--	142	5.0	1.90	--		906		
1015	5050	26.6C	7.8	2960	7.24	10.86	15.92		.00	1.25		4.00	.08		--		843	5.3	
					21	32	47			23		75	2						
	20S/16E-30N01 M																		
05/23/73	5050	70.0F	7.4	1900	79	108	242	--	0	276	--	119	34.0	1.40	--		640		
0845	5050	21.1C	8.1	2090	3.94	8.88	10.53		.00	4.52		3.36	.55		--		415	4.2	
					17	38	45			54		40	7						
	20S/16E-32D03 M																		
05/23/73	5050	72.0F	7.4	2200	137	124	272	--	0	184	--	100	9.0	1.80	--		853		
0930	5050	22.2C	7.8	2510	6.84	10.20	11.83		.00	3.02		2.82	.15		--		702	4.1	
					24	35	41			50		47	3						
	20S/16E-32M01 M																		
05/22/73	5050	75.0F	7.4	2900	216	177	355	--	0	165	--	182	4.6	1.70	--		1270		
1700	5050	23.9C	7.8	3370	10.78	14.56	15.44		.00	2.70		5.13	.07		--		1133	4.3	
					26	36	38			34		65	1						
	20S/22E-06C01 M																		
10/10/72	5129				22	4.6	112	--	0	148	--	110	.3	--	--		74		
	5050		7.7	646	1.10	.38	4.87		.00	2.43		3.10	.00		--		0	5.7	
					17	6	77			44		56							
	20S/23E-08G01 M																		
10/10/72	5129				2.1	3.9	19	--	0	66	--	4.1	.2	--	--		21		
	5050		7.3	125	.10	.32	.83		.00	1.08		.12	.00		--		0	1.8	
					8	26	66			90		10							
	20S/26E-01P01 M																		
09/19/73	5050	78.8F	7.9	720	53	30	41	--	0	194	--	74	57.0	--	--		258		
1345	5050	26.0C	8.3	714	2.64	2.47	1.78		.00	3.18		2.09	.92		--		97	1.1	
					38	36	26			51		34	15						
	20S/26E-02E03 M																		
11/27/72	5050	60.8F	7.4	1750	147	105	76	--	0	231	--	530	49.0	.10	--		801		
1125	5050	16.0C	7.5	2160	7.34	8.64	3.31		.00	3.79		14.95	.79		--		610	1.2	
					38	45	17			19		77	4						
09/17/73	5050	77.9F	7.3	2100	150	107	75	--	0	273	--	496	60.0	--	--		814		
1145	5050	25.5C	7.8	2040	7.49	8.80	3.26		.00	4.47		13.99	.97		--		591	1.1	
					38	45	17			23		72	5						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY RM	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE								MILLIGRAMS PER LITER					REM
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	SAR	
		CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	20S/26E-03D01 M																		
11/27/72	5050	63.5F	7.2	2200	54	72	394	--	0	598	--	482	.0	1.40	--		431		
1345	5050	17.5C	7.8	2530	2.69	5.92	17.14		.00	9.80		13.59	.00		--		0	8.3	
					10	23	67			42		58							
09/17/73	5050	45.0F	7.4	3200	56	64	372	--	0	583	--	476	.4	--	--		403		X
1205	5050	7.2C	8.2	2370	2.79	5.26	16.18		.00	9.56		13.42	.01		--		0	8.1	
					12	22	67			42		58							
	20S/26E-03D02 M																		
09/17/73	5050	78.8F	7.2	2120	90	80	213	--	0	397	--	456	28.0	--	--		554		
1225	5050	26.0C	8.3	2090	4.49	6.58	9.27		.00	6.51		12.86	.45		--		228	3.9	
					22	32	46			33		65	2						
	20S/26E-05R01 M																		
09/17/73	5050	72.5F	7.2	1320	72	58	94	--	0	274	--	230	20.0	--	--		417		
1400	5050	22.5C	7.9	1270	3.59	4.77	4.09		.00	4.49		6.49	.32		--		194	2.0	
					29	38	33			40		57	3						
	20S/26E-07C01 M																		
09/17/73	5050	74.3F	7.9	910	49	35	82	--	0	211	--	125	26.0	--	--		266		
1430	5050	23.5C	8.2	912	2.45	2.88	3.57		.00	3.46		3.53	.42		--		94	2.2	
					28	32	40			47		48	6						
	20S/26E-08A01 M																		
09/13/73	5050	75.2F	7.9	750	34	20	100	--	0	145	--	162	15.0	--	--		168		
0930	5050	24.0C	8.3	824	1.70	1.64	4.35		.00	2.38		4.57	.24		--		48	3.4	
					22	21	57			33		64	3						
	20S/26E-09B02 M																		
11/27/72	5050	64.4F	7.2	1800	123	70	173	--	0	286	--	403	31.0	.30	--		597		
1500	5050	18.0C	7.8	1960	6.14	5.76	7.53		.00	4.69		11.36	.50		--		361	3.1	
					32	30	39			28		69	3						
	20S/26E-09J01 M																		
11/27/72	5050	51.8F	7.4	650	76	41	51	--	0	206	--	151	33.0	.10	--		358		X
1530	5050	11.0C	7.8	956	3.79	3.37	2.22		.00	3.38		4.26	.53		--		189	1.2	
					40	36	24			41		52	6						
	20S/26E-09P01 M																		
09/14/73	5050	74.3F	7.4	1150	123	46	56	--	0	240	--	181	74.0	--	--		496		
0830	5050	23.5C	8.3	1220	6.14	3.78	2.44		.00	3.93		5.10	1.19		--		300	1.1	
					50	31	20			38		50	12						
	20S/26E-10D02 M																		
11/27/72	5050	50.0F	7.8	600	57	38	59	--	0	146	--	180	20.0	.10	--		301		X
1430	5050	10.0C	8.0	917	2.84	3.13	2.57		.00	2.39		5.08	.32		--		179	1.5	
					33	37	30			31		65	4						
	20S/26E-11M01 M																		
09/19/73	5050	86.0F	7.5	1110	90	42	48	--	0	206	--	135	92.0	--	--		400		
1415	5050	30.0C	8.3	1010	4.49	3.45	2.09		.00	3.38		3.81	1.48		--		228	1.0	
					45	34	21			39		44	17						
	20S/26E-15C01 M																		
09/13/73	5050	75.2F	7.6	620	47	24	43	--	0	141	--	93	30.0	--	--		215		
1440	5050	24.0C	8.3	651	2.35	1.97	1.87		.00	2.31		2.62	.48		--		101	1.3	
					38	32	30			43		48	9						
	20S/26E-19P01 M																		
09/13/73	5050	73.4F	7.5	390	31	16	37	--	4.0	191	--	19	16.0	--	--		145		
1300	5050	23.0C	8.4	430	1.55	1.32	1.61		.13	3.13		.54	.26		--		0	1.3	
					35	29	36												
	20S/26E-21P01 M																		
09/14/73	5050	76.1F	8.0	305	21	10	41	--	0	175	--	12	9.1	--	--		94		
0930	5050	24.5C	8.3	354	1.05	.82	1.78		.00	2.87		.34	.15		--		0	1.8	
					29	22	49			85		10	4						
	20S/26E-23A02 M																		
09/14/73	5050	70.7F	7.3	770	65	32	48	--	0	232	--	57	78.0	--	--		295		
1230	5050	21.5C	8.0	796	3.24	2.63	2.09		.00	3.80		1.61	1.26		--		104	1.2	
					41	33	26			57		24	19						
	20S/26E-23R01 M																		
09/14/73	5050	74.3F	7.6	510	38	16	51	--	0	186	--	29	50.0	--	--		162		
1115	5050	23.5C	8.3	559	1.90	1.32	2.22		.00	3.05		.82	.81		--		9	1.8	
					35	24	41			65		18	17						
	20S/27E-07F01 M																		
06/05/73	5050	76 F	7.6	1080	75	43	84	--	0	172	--	231	34.0	.00	--		366		
1230	5050	24 C	7.8	1160	3.74	3.54	3.65		.00	2.82		6.51	.55		--		223	1.9	
					34	32	33			29		66	6						
	20S/27E-07F02 M																		
06/05/73	5050	76 F	7.6	660	52	27	56	--	0	181	--	112	37.0	.00	--		240		
1225	5050	24 C	7.8	757	2.59	2.22	2.44		.00	2.97		3.16	.60		--		92	1.6	
					36	31	34			44		47	9						
	20S/27E-07H01 M																		
11/27/72	5050	68.0F	7.5	750	53	38	73	--	0	212	--	112	52.0	.10	--		290		
1100	5050	20.0C	7.8	883	2.64	3.13	3.18		.00	3.47		3.16	.84		--		115	1.9	
					29	35	36			46		42	11						
06/05/73	5050	74 F	7.5	830	57	32	73	--	0	226	--	100	35.0	.00	--		273		
1250	5050	23 C	7.8	868	2.84	2.63	3.18		.00	3.70		2.82	.56		--		89	1.9	
					33	30	37			52		40	8						
	20S/27E-07K01 M																		
06/05/73	5050	77 F	7.6	750	61	34	73	--	0	216	--	98	61.0	.00	--		290		
1215	5050	25 C	7.8	922	3.04	2.80	3.18		.00	3.54		2.76	.98		--		115	1.9	
					34	31	35			49		38	13						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCM	SAR	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY														
	20S/27E-07K02	M																	
06/05/73	5050	76 F	7.5	1100	81	44	86	--	0	196	--	224	47.0	.00	--		386		
1245	5050	24 C	7.7	1200	4.04	3.62	3.74		.00	3.21		6.32	.76		--		223	1.9	
					35	32	33			31		61	7						
	20S/27E-07M02	M																	
11/27/72	5050	71.6F	7.4	850	68	45	63	--	0	189	--	173	44.0	.10	--		354		
1050	5050	22.0C	8.0	1000	3.39	3.70	2.74		.00	3.10		4.88	.71		--		200	1.5	
					34	38	28			36		56	8						
06/05/73	5050	75 F	7.6	930	73	38	67	--	0	192	--	166	43.0	.00	--		338		
1235	5050	24 C	7.7	1010	3.64	3.13	2.91		.00	3.15		4.68	.69		--		181	1.6	
					38	32	30			37		55	8						
	20S/27E-08A02	M																	
06/05/73	5050	74 F	7.6	780	52	32	74	--	0	489	--	41	71.0	.00	--		262		
1030	5050	23 C	8.0	808	2.59	2.63	3.22		.00	8.01		1.16	1.15		--		0	2.0	
					31	31	38			78		11	11						
	20S/27E-08E02	M																	
06/05/73	5050	74 F	7.5	820	56	32	72	--	0	256	--	78	67.0	.00	--		275		
1300	5050	23 C	7.9	857	2.79	2.63	3.13		.00	4.20		2.20	1.08		--		61	1.9	
					33	31	37			56		29	14						
	20S/27E-08L01	M																	
06/05/73	5050	72 F	7.3	1020	81	41	93	--	0	387	--	115	71.0	.00	--		370		
0805	5050	22 C	8.0	1120	4.04	3.37	4.05		.00	6.34		3.24	1.15		--		54	2.1	
					35	29	35			59		30	11						
	20S/27E-18C01	M																	
06/06/73	5050	74 F	7.5	1220	104	47	87	--	0	227	--	234	61.0	.00	--		453		
1130	5050	23 C	7.8	1330	5.19	3.87	3.78		.00	3.72		6.60	.98		--		267	1.8	
					40	30	29			33		58	9						
	20S/27E-19G01	M																	
09/14/73	5050	78.8F	7.7	1030	88	38	63	--	0	277	--	96	85.0	--	--		378		
1345	5050	26.0C	8.1	1010	4.39	3.13	2.74		.00	4.54		2.71	1.37		--		149	1.4	
					43	31	27			53		31	16						
	21S/16E-04N03	M																	
05/22/73	5050	78.0F	7.5	2200	132	102	276	--	0	173	--	116	5.7	1.50	--		748		
1450	5050	25.5C	8.2	2450	6.59	8.39	12.01		.00	2.84		3.27	.09		--		607	4.4	
					24	31	44			46		53	1						
	21S/16E-09N01	M																	
05/22/73	5050	76.0F	7.6	1320	78	56	161	--	0	177	--	43	4.1	.60	--		425		
1535	5050	24.4C	8.0	1450	3.89	4.61	7.00		.00	2.90		1.21	.07		--		280	3.4	
					25	30	45			69		29	2						
	21S/27E-21A01	M																	
11/28/72	5050	62.6F	7.2	900	122	28	50	--	0	462	--	63	50.0	.10	--		421		
1100	5050	17.0C	7.7	1030	6.09	2.30	2.18		.00	7.57		1.78	.81		--		41	1.1	
					58	22	21			75		18	8						
02/21/73	5050				119	26	48	--	0	445	--	50	50.0	--	--	609	404		
	5050		7.5	961	5.94	2.14	2.09		.00	7.29		1.41	.81		--		40	1.0	
					58	21	21			77		15	9						
	21S/27E-21E02	M																	
11/28/72	5050	51.8F	7.2	350	68	13	30	--	0	271	--	16	27.0	.00	--		223		X
0910	5050	11.0C	7.6	559	3.39	1.07	1.31		.00	4.44		.45	.44		--		1	0.9	
					59	19	23			83		8	8						
	21S/27E-21N01	M																	
11/28/72	5050	48.2F	6.8	260	46	11	20	--	0	167	--	18	29.0	.00	--		162		X
0900	5050	9.0C	7.1	417	2.30	.90	.87		.00	2.74		.51	.47		--		23	0.7	
					57	22	21			74		14	13						
02/21/73	5050				29	5.6	15	--	0	123	--	8.1	9.3	--	--	162	96		
	5050		7.7	254	1.45	.46	.65		.00	2.02		.23	.15		--		0	0.7	
					57	18	25			84		10	6						
	21S/27E-21R02	M																	
11/28/72	5050	55.4F	7.0	360	49	9.5	28	--	0	190	--	27	15.0	.20	--		161		X
0940	5050	13.0C	7.5	463	2.45	.78	1.22		.00	3.11		.76	.24		--		6	1.0	
					55	18	27			76		18	6						
	21S/27E-22M02	M																	
11/28/72	5050	53.6F	7.0	350	55	13	29	--	0	204	--	23	33.0	.20	--		190		X
1045	5050	12.0C	7.2	502	2.74	1.07	1.26		.00	3.34		.65	.53		--		24	0.9	
					54	21	25			74		14	12						
	21S/27E-27C01	M																	
11/28/72	5050	51.8F	6.8	290	49	9.5	23	--	0	182	--	20	20.0	.10	--		161		X
1320	5050	11.0C	7.4	436	2.45	.78	1.00		.00	2.98		.56	.32		--		13	0.8	
					58	18	24			77		15	8						
	21S/27E-27D01	M																	
11/28/72	5050	53.6F	6.8	390	37	12	62	--	0	208	--	44	23.0	.60	--		142		X
1120	5050	12.0C	7.1	602	1.85	.99	2.70		.00	3.41		1.24	.37		--		0	2.3	
					33	18	49			68		25	7						
02/21/73	5050				44	12	71	--	0	206	--	61	23.0	--	--	404	160		
	5050		7.3	652	2.20	.99	3.09		.00	3.38		1.72	.37		--		0	2.4	
					35	16	49			62		31	7						
	21S/27E-27F01	M																	
11/28/72	5050	68.0F	6.8	500	26	14	62	--	0	178	--	46	14.0	.60	--		122		
1430	5050	20.0C	7.0	551	1.30	1.15	2.70		.00	2.92		1.30	.23		--		0	2.4	
					25	22	52			66		29	5						
02/21/73	5050				33	8.6	68	--	0	183	--	49	29.0	--	--	378	117		
	5050		7.2	601	1.65	.71	2.96		.00	3.00		1.38	.47		--		0	2.7	
					31	13	56			62		28	10						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
			CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	21S/27E-27L02 M																			
11/28/72	5050	51.8F	7.0	360	54	11	37	--	0	223	--	28	27.0	.20	--		181			X
1410	5050	11.0C	8.1	540	2.69	.90	1.61		.00	3.65		.79	.44		--		0	1.2		
					52	17	31			75		16	9							
	21S/27E-27M02 M																			
11/28/72	5050	50.9F	7.2	290	47	12	26	--	0	201	--	17	20.0	.10	--		167			X
0815	5050	10.5C	7.4	440	2.35	.99	1.13		.00	3.29		.48	.32		--		3	0.9		
					53	22	25			80		12	8							
	21S/27E-28E02 M																			
11/28/72	5050		7.2	800	89	23	81	--	0	411	--	36	44.0	.20	--		316			
0845	5050		7.8	887	4.44	1.89	3.52		.00	6.74		1.02	.71		--		0	2.0		
					45	19	36			80		12	8							
02/21/73	5050				86	13	68	--	0	366	--	35	52.0	--	--	522	270			
	5050		7.6	834	4.29	1.07	2.96		.00	6.00		.99	.84		--		0	1.8		
					52	13	36			77		13	11							
	22S/27E-11C01 M																			
02/21/73	5050				74	11	31	--	0	332	--	20	25.0	--	--	375	231			
	5050		7.7	631	3.69	.90	1.35		.00	5.44		.56	.40		--		0	0.9		
					62	15	23			85		9	6							
	23S/32E-14Q01 M																			
04/23/73	5050	70 F	7.0	310	41	8.3	18	--	0	146	--	7.4	9.6	--	--		136			
1725	5050	21 C	8.0	368	2.05	.68	.78		.00	2.39		.21	.15		--		17	0.7		
					58	19	22			87		8	5							
	27S/26E-08Q01 M																			
04/24/73	5121	67 F			58	6.9	32	--	0	129	--	78	6.3	.00	--		173			
1150	5050	19 C	7.6	534	2.89	.57	1.39		.00	2.11		2.20	.10		--		68	1.1		
					60	12	29			48		50	2							
	27S/26E-22Q01 M																			
10/18/72	5702				10	4.9	33	1.0	1.2	53	7.2	46	--	.00	.3	129	45			
	5803		8.6	250	.50	.40	1.46	.03	.04	.87	.15	1.30			--	130	0	2.2		
					21	17	61	1												
	27S/26E-27A01 M																			
10/05/72	5702				27	8.1	63	1.3	0	144	12	78	--	.25	.9	278	102			
	5803		7.7	435	1.38	.67	2.77	.03	.00	2.36	.25	2.20			--	262	0	2.7		
					28	14	57	1		49	5	46								
	27S/26E-27R01 M																			
10/05/72	5702				262	58	127	6.2	0	199	278	509	--	.05	.0	1723	895			E
	5803		7.8	2041	13.07	4.82	5.52	.16	.00	3.26	5.80	14.36			--	1339	732	1.8		T
					55	20	23	1		14	25	61								
	27S/26E-32A01 M																			
04/24/73	5121	74.5F			44	3.4	32	--	0	88	--	32	32.0	.00	--		125			
1120	5050	23.6C	7.7	431	2.20	.28	1.39		.00	1.44		.90	.52		--		52	1.3		
					57	7	36			50		31	18							
	27S/26E-34C01 M																			
10/30/72	5121	76 F			98	23	50	--	0	89	--	115	36.0	.00	--		341			
	5050	24 C	7.6	892	4.89	1.89	2.18		.00	1.46		3.24	.58		--		266	1.2		
					55	21	24			28		61	11							
04/24/73	5121	76.5F			103	14	51	--	0	80	--	103	28.0	.00	--		314			
1130	5050	24.7C	7.6	897	5.14	1.15	2.22		.00	1.31		2.90	.45		--		249	1.3		
					60	14	26			28		62	10							
	28S/26E-03A01 M																			
10/26/72	5121	80.5F			58	6.2	60	--	0	68	--	108	18.0	--	--		170			
1045	5050	26.9C	7.2	662	2.89	.51	2.61		.00	1.11		3.05	.29		--		115	2.0		
					48	8	43			25		69	7							
04/24/73	5121	79.5F			110	7.7	58	--	0	55	--	158	38.0	.00	--		306			
1105	5050	26.4C	7.3	979	5.49	.63	2.52		.00	.90		4.46	.61		--		261	1.4		
					64	7	29			15		75	10							
	28S/26E-04C01 M																			
10/26/72	5121	75.5F			288	50	73	--	0	122	--	242	200	--	--		924			
1055	5050	24.1C	7.5	2080	14.37	4.11	3.18		.00	2.00		6.82	3.23		--		825	1.0		
					66	19	15			17		57	27							
04/24/73	5121	75 F			366	29	86	--	0	151	--	283	243	.00	--		1030			
1110	5050	24 C	7.4	2450	18.26	2.38	3.74		.00	2.47		7.98	3.92		--		909	1.2		
					75	10	15			17		56	27							
	28S/27E-07C02 M																			
04/24/73	5121	87 F			1.2	.0	51	--	0	109	--	23	.0	.10	--		3			
1045	5050	31 C	7.5	256	.06	.00	2.22		.00	1.79		.65	.00		--		0	12.8		
					3		97			73		27								
	29S/27E-05D01 M																			
05/16/73	5050	77.0F	7.4	2100	115	11	426	4.6	7.0	388	639	176	28.0	2.00	--	1560	332			
1315	5050	25.0C	8.3	2360	5.74	.90	18.53	.12	.23	6.36	13.30	4.96	.45		--	1599	3	10.2		
					23	4	73		1	25	53	20	2							
	29S/27E-08F01 M																			
05/16/73	5050	77.0F	7.4	1000	96	10	231	--	0	369	--	92	55.0	1.20	--		283			X
1250	5050	25.0C	7.8	1550	4.79	.82	10.05		.00	6.05		2.59	.89		--		0	6.0		
					31	5	64			63		27	9							
	29S/27E-09K02 M																			
05/17/73	5050	77.0F	7.2	900	121	7.9	61	--	0	112	--	61	16.0	.10	--		335			
0825	5050	25.0C	7.7	930	6.04	.65	2.65		.00	1.84		1.72	.26		--		243	1.5		
					65	7	28			48		45	7							

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

ATE IME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TOS SUM	TM NCM	SAR	REM
		CENTRAL VALLEY SAN JOAQUIN VALLEY																	
	29S/27E-10R05	M																	
/17/73	5050	73.4F	7.4	650	86	9.0	42	2.3	0	186	80	78	10.0	.10	--	421	252		
0800	5050	23.0C	8.2	714	4.29	.74	1.83	.06	.00	3.05	1.67	2.20	.16		--	399	99	1.2	
					62	11	26	1		43	24	31	2						
	29S/27E-15P01	M																	
/17/73	5050	75.2F	7.0	900	112	19	80	--	0	294	--	76	51.0	.20	--		360		
0715	5050	24.0C	8.0	1030	5.59	1.56	3.48		.00	4.82		2.14	.82		--		117	1.8	
					53	15	33			62		28	11						
	29S/27E-17H01	M																	
/16/73	5050	75.2F	8.0	465	55	3.2	46	--	0	64	--	39	11.0	.10	--		150		
1345	5050	24.0C	7.8	545	2.74	.26	2.00		.00	1.05		1.10	.18		--		98	1.6	
					55	5	40			45		47	8						
	29S/27E-19L01	M																	
/16/73	5050	71.6F	7.2	650	66	12	60	--	0	212	--	32	22.0	.20	--		215		
1245	5050	22.0C	8.0	687	3.29	.99	2.61		.00	3.47		.90	.35		--		41	1.8	
					48	14	38			74		19	7						
	29S/27E-21E01	M																	
/16/73	5050	77.0F	7.2	500	57	9.7	63	--	0	242	--	29	9.1	.20	--		182		X
1045	5050	25.0C	7.8	632	2.84	.80	2.74		.00	3.97		.82	.15		--		0	2.0	
					45	13	43			80		17	3						
	29S/27E-21J03	M																	
/16/73	5050	73.4F	7.6	235	27	3.3	21	1.9	0	93	27	17	2.4	.10	--	150	81		
1155	5050	23.0C	7.9	266	1.35	.27	.91	.05	.00	1.52	.56	.48	.04		--	145	5	1.0	
					52	10	35	2		58	22	18	2						
	29S/27E-22E01	M																	
/16/73	5050	73.4F	7.8	300	39	4.7	23	--	0	159	--	15	2.4	.10	--		117		
1210	5050	23.0C	8.0	342	1.95	.39	1.00		.00	2.61		.42	.04		--		0	0.9	
					58	12	30			85		14	1						
	29S/27E-23H01	M																	
3/14/73	5701				29	1.0	19	2.2	.3	109	13	14	2.0	--	.2	159	78		
	5701		7.7	249	1.45	.08	.83	.06	.01	1.79	.27	.39	.03		24.0	158	0	0.9	
					60	3	34	2		72	11	16	1						
	29S/27E-24N01	M																	
9/12/73	5701				26	3.0	19	2.0	.2	97	13	20	2.0	--	.2	159	78		
	5701		7.4	246	1.30	.25	.83	.05	.01	1.59	.27	.56	.03		26.0	159	0	0.9	
					53	10	34	2		65	11	23	1						
	29S/27E-25B02	M																	
9/13/73	5701				30	5.0	20	2.2	.2	122	17	15	4.0	--	.1	181	94		
	5701		7.3	273	1.50	.41	.87	.06	.01	2.00	.35	.42	.06		28.0	181	0	0.9	
					53	14	31	2		70	12	15	2						
	29S/27E-25D02	M																	
6/07/73	5701				27	2.0	19	2.6	.3	104	14	14	5.0	--	.2	160	76		
	5701		7.6	238	1.35	.16	.83	.07	.01	1.70	.29	.39	.08		25.0	160	0	1.0	
					56	7	34	3		69	12	16	3						
	29S/27E-25G01	M																	
5/09/73	5701				24	1.0	19	2.2	.4	92	13	12	3.0	--	.2	142	64		
	5701		7.8	209	1.20	.08	.83	.06	.01	1.51	.27	.34	.05		24.0	144	0	1.0	
					55	4	38	3		69	12	16	2						
	29S/27E-25G02	M																	
6/07/73	5701				30	2.0	18	1.9	.4	109	17	11	4.0	--	.2	162	84		
	5701		7.7	249	1.50	.16	.78	.05	.01	1.79	.35	.31	.06		24.0	162	0	0.9	
					60	6	31	2		71	14	12	2						
	29S/27E-25R01	M																	
1/11/73	5701				26	4.0	20	2.8	.3	112	16	11	3.0	--	.2	165	82		
	5701		7.5	239	1.30	.33	.87	.07	.01	1.84	.33	.31	.05		26.0	164	0	1.0	
					51	13	34	3		72	13	12	2						
	29S/27E-26D02	M																	
5/16/73	5050	77.0F	7.2	500	55	9.7	29	--	0	183	--	21	8.7	.10	--		177		
1045	5050	25.0C	8.0	480	2.74	.80	1.26		.00	3.00		.59	.14		--		27	0.9	
					57	17	26			80		16	4						
	29S/27E-26J01	M																	
3/15/73	5701				26	1.0	19	2.0	.6	104	14	11	1.0	--	.2	150	70		
	5701		7.8	224	1.30	.08	.83	.05	.02	1.70	.29	.31	.02		23.0	149	0	1.0	
					58	4	37	2	1	73	12	13	1						
	29S/27E-27B04	M																	
5/16/73	5050	71.6F	7.4	465	72	20	78	--	0	328	--	79	9.8	.40	--		261		X
1000	5050	22.0C	7.6	853	3.59	1.64	3.39		.00	5.38		2.23	.16		--		0	2.1	
					42	19	39			69		29	2						
	29S/27E-27D01	M																	
5/16/73	5050	84.2F	7.4	430	53	4.6	28	--	0	164	--	38	2.8	.10	--		151		
1030	5050	29.0C	8.0	441	2.64	.38	1.22		.00	2.69		1.07	.05		--		17	1.0	
					62	9	29			71		28	1						
	29S/27E-28B01	M																	
5/16/73	5050	68.0F	7.4	210	25	5.5	19	1.6	0	105	10	15	17.0	.10	--	148	85		
1015	5050	20.0C	7.9	256	1.25	.45	.83	.04	.00	1.72	.21	.42	.27		--	145	0	0.9	
					49	18	32	2		66	8	16	10						
	29S/27E-29K01	M																	
5/16/73	5050	69.8F	7.2	395	54	9.1	29	--	0	186	--	28	7.0	.10	--		172		
0940	5050	21.0C	8.3	482	2.69	.75	1.26		.00	3.05		.79	.11		--		20	1.0	
					57	16	27			77		20	3						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY																
	29S/27E-32C01	M																		
05/16/73	5050		77.0F	7.4	445	54	9.1	33	--	0	182	--	16	30.0	.10	--		172		
0920	5050		25.0C	8.1	495	2.69	.75	1.44		.00	2.98		.45	.48		--		23	1.1	
						55	15	30			76		12	12						
	29S/27E-35A02	M																		
08/14/73	5701					23	2.0	18	1.9	.2	97	13	12	1.0	--	.2	146	68		
	5701			7.4	216	1.15	.16	.78	.05	.01	1.59	.27	.34	.02		27.0	146	0	1.0	
						54	7	36	2		71	12	15	1						
	29S/27E-35E01	M																		
04/11/73	5701					30	1.0	19	2.2	.3	112	12	14	1.0	--	.4	162	80		
	5701			7.4	247	1.50	.08	.83	.06	.01	1.84	.25	.39	.02		26.0	161	0	0.9	
						61	3	34	2		73	10	16	1						
	29S/27E-35G01	M																		
08/15/73	5701					22	4.0	17	2.1	.1	95	14	14	3.0	--	.3	150	72		
	5701			7.4	220	1.10	.33	.74	.05	.00	1.56	.29	.39	.05		27.0	150	0	0.9	
						50	15	33	2		68	13	17	2						
	29S/27E-36M01	M																		
08/15/73	5701					53	10	25	2.9	.1	139	29	61	5.0	--	.2	283	172		
	5701			7.2	475	2.64	.82	1.09	.07	.00	2.28	.60	1.72	.08		29.0	283	59	0.8	
						57	18	24	2		49	13	37	2						
	29S/27E-36K01	M																		
06/07/73	5701					29	1.0	18	2.3	.3	102	17	14	1.0	--	.2	157	76		
	5701			7.6	238	1.45	.08	.78	.06	.01	1.67	.35	.39	.02		24.0	157	0	0.9	
						61	3	33	3		68	14	16	1						
	29S/27E-36K02	M																		
02/09/73	5701					26	3.0	19	2.5	.3	107	15	14	1.0	--	.1	159	78		
	5701			7.7	237	1.30	.25	.83	.06	.01	1.75	.31	.39	.02		25.0	158	0	0.9	
						53	10	34	2		71	13	16	1						
	29S/28E-16E01	M																		
07/17/73	5701					32	1.0	18	1.9	.5	114	16	13	.0	--	.2	167	86		
	5701			7.9	252	1.60	.08	.78	.05	.02	1.87	.33	.37	.00		28.0	166	0	0.9	
						64	3	31	2	1	72	13	14							
	29S/28E-16M01	M																		
01/11/73	5701					37	3.0	22	2.2	.6	116	27	19	4.0	--	.2	199	104		
	5701			8.0	300	1.85	.25	.96	.06	.02	1.90	.56	.54	.06		26.0	198	9	0.9	
						59	8	31	2	1	62	18	18	2						
	29S/28E-16Q01	M																		
05/09/73	5701					64	7.0	27	2.0	.6	109	87	44	1.0	--	.1	306	186		
	5701			7.9	495	3.19	.58	1.17	.05	.02	1.79	1.81	1.24	.02		22.0	308	98	0.9	
						64	12	23	1		37	37	25							
	29S/28E-16R01	M																		
06/07/73	5701					34	2.0	29	1.7	.4	89	39	33	2.0	--	.2	205	94		
	5701			7.9	344	1.70	.16	1.26	.04	.01	1.46	.81	.93	.03		21.0	206	20	1.3	
						54	5	40	1		45	25	29	1						
	29S/28E-17R01	M																		
05/11/73	5701					47	2.0	21	2.3	.5	102	36	36	5.0	--	.2	226	124		
	5701			7.9	361	2.35	.16	.91	.06	.02	1.67	.75	1.02	.08		28.0	228	41	0.8	
						68	5	26	2	1	47	21	29	2						
	29S/28E-19J02	M																		
01/11/73	5701					26	3.0	21	2.3	.6	113	14	10	1.0	--	.1	160	78		
	5701			7.8	233	1.30	.25	.91	.06	.02	1.85	.29	.28	.02		25.0	158	0	1.0	
						52	10	36	2	1	75	12	11	1						
	29S/28E-19J03	M																		
01/11/73	5701					22	1.0	18	1.8	.3	90	12	8.0	1.0	--	.1	133	60		E
	5701			8.0	189	1.10	.08	.78	.05	.01	1.48	.25	.23	.02		24.0	132	0	1.0	
						55	4	39	2	1	74	13	12	1						
	29S/28E-19L01	M																		
05/09/73	5701					30	3.0	19	2.1	.5	109	15	16	1.0	--	.2	165	86		
	5701			7.8	254	1.50	.25	.83	.05	.02	1.79	.31	.45	.02		26.0	166	0	0.9	
						57	10	32	2	1	69	12	17	1						
	29S/28E-19N02	M																		
01/11/73	5701					35	4.0	24	3.1	.3	131	30	13	4.0	--	.2	207	106		
	5701			7.6	296	1.75	.33	1.04	.08	.01	2.15	.62	.37	.06		28.0	206	0	1.0	
						55	10	33	3		67	19	12	2						
	29S/28E-19Q01	M																		
04/11/73	5701					27	.0	18	2.1	.6	106	13	10	.0	--	.2	150	70		
	5701			7.9	218	1.35	.00	.78	.05	.02	1.74	.27	.28	.00		26.0	149	0	1.0	
						62		36	2	1	75	12	12							S
	29S/28E-20A01	M																		
02/09/73	5701					57	6.0	22	2.6	.6	96	49	59	6.0	--	.1	274	166		
	5701			7.9	452	2.84	.49	.96	.07	.02	1.57	1.02	1.66	.10		24.0	273	87	0.7	
						65	11	22	2		36	23	38	2						
	29S/28E-20G02	M																		
04/11/73	5701					70	4.0	25	2.4	.3	82	70	81	.0	--	.1	319	192		
	5701			7.9	541	3.49	.33	1.09	.06	.01	1.34	1.46	2.28	.00		25.0	318	124	0.8	
						70	7	22	1		26	29	45							
	29S/28E-20H01	M																		
03/14/73	5701					19	.0	18	1.2	.4	84	11	9.0	.0	--	.1	122	50		
	5701			8.1	179	.95	.00	.78	.03	.01	1.38	.23	.25	.00		21.0	121	0	1.1	
						54		44	2	1	74	12	13							S

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	SIO2	TDS SUM	TH NCH	SAR	REM
CENTRAL VALLEY																			
SAN JOAQUIN VALLEY																			
295/28E-20L01 M																			
/73 S701				56	5.0	24	2.5	.3	90	68	54	.0	--	.1		281	160		
S701		7.7	453	2.79	.41	1.04	.06	.01	1.48	1.42	1.52	.00			26.0	280	86	0.8	
				65	10	24	1		33	32	34								
295/28E-21C01 M																			
/73 S701				19	1.0	21	1.8	1.2	90	13	9.0	.0	--	.1		133	52		
S701		8.3	192	.95	.08	.91	.05	.04	1.48	.27	.25	.00			22.0	132	0	1.3	
				48	4	46	3	2	73	13	12								
295/28E-21D01 M																			
/73 S701				33	2.0	20	1.3	.4	92	20	30	.0	--	.1		175	92		
S701		7.9	282	1.65	.16	.87	.03	.01	1.51	.42	.85	.00			23.0	175	15	0.9	
				61	6	32	1		54	15	30								
295/28E-21E01 M																			
/73 S701				21	3.0	19	1.5	.9	84	16	15	1.0	--	.1		143	64		
S701		8.2	210	1.05	.25	.83	.04	.03	1.38	.33	.42	.02			23.0	142	0	1.0	
				48	12	38	2	1	63	15	19	1							
295/28E-21G01 M																			
/73 S701				17	5.0	26	.7	1.0	57	23	30	4.0	--	.1		152	60		
S701		8.4	247	.85	.41	1.13	.02	.03	.93	.48	.85	.06			20.0	155	15	1.4	
				35	17	47	1	1	40	20	36	3							
295/28E-21M01 M																			
/73 S701				31	2.0	20	1.4	.4	82	28	23	1.0	--	.1		170	88		
S701		7.9	260	1.55	.16	.87	.04	.01	1.34	.58	.65	.02			23.0	170	18	0.9	
				59	6	33	2		52	22	25	1							
295/28E-29D01 M																			
/73 S701				29	2.0	21	1.9	.6	104	18	17	1.0	--	.1		167	80		
S701		8.0	248	1.45	.16	.91	.05	.02	1.70	.37	.48	.02			24.0	166	0	1.0	
				56	6	35	2	1	66	14	19	1							
295/28E-29L01 M																			
/73 S701				18	2.0	22	1.0	1.2	80	19	11	1.0	--	.0		133	52		
S701		8.3	204	.90	.16	.96	.03	.04	1.31	.40	.31	.02			18.0	133	0	1.3	
				44	8	47	1	2	63	19	15	1							
295/28E-29P01 M																			
/73 S701				42	1.0	41	1.8	.5	82	94	24	.0	--	.1		257	108		
S701		8.0	422	2.10	.08	1.78	.05	.02	1.34	1.96	.68	.00			13.0	258	41	1.7	
				52	2	44	1	1	34	49	17								
29S/28E-29Q01 M																			
/73 S701				13	1.0	51	1.1	1.4	107	30	19	1.0	--	.3		184	36		
S701		8.3	303	.65	.08	2.22	.03	.05	1.75	.62	.54	.02			15.0	185	0	3.7	
				22	3	74	1	2	59	21	18	1							
295/28E-30A01 M																			
/73 S701				25	1.0	18	1.6	.6	96	13	11	1.0	--	.2		122	66		
S701		7.8	211	1.25	.08	.78	.04	.02	1.57	.27	.31	.02			23.0	141	0	1.0	
				58	4	36	2	1	72	12	14	1							
29S/28E-30F02 M																			
/73 S701				35	4.0	20	2.6	.2	122	24	16	3.0	--	.2		189	104		
S701		7.3	293	1.75	.33	.87	.07	.01	2.00	.50	.45	.05			25.0	190	4	0.9	
				58	11	29	2		66	17	15	2							
295/28E-30G01 M																			
/73 S701				37	5.0	20	2.6	.3	122	31	16	7.0	--	.2		206	113		
S701		7.6	318	1.85	.41	.87	.07	.01	2.00	.65	.45	.11			28.0	207	13	0.8	
				58	13	27	2		62	20	14	3							
295/28E-30H02 M																			
/73 S701				34	1.0	20	2.7	.3	121	22	12	1.0	--	.1		180	90		
S701		7.6	264	1.70	.08	.87	.07	.01	1.98	.46	.34	.02			26.0	178	0	0.9	
				63	3	32	3		70	16	12	1							
295/28E-30K02 M																			
/73 S701				40	3.0	21	2.6	.4	132	28	17	2.0	--	.2		205	113		
S701		7.6	316	2.00	.25	.91	.07	.01	2.16	.58	.48	.03			27.0	206	4	0.9	
				62	8	28	2		66	18	15	1							
295/28E-30Q02 M																			
/73 S701				38	3.0	20	2.4	.2	129	26	15	5.0	--	.2		199	108		
S701		7.4	313	1.90	.25	.87	.06	.01	2.11	.54	.42	.08			27.0	200	2	0.8	
				62	8	28	2		67	17	13	3							
29S/28E-30Q04 M																			
/73 S701				33	4.0	20	2.3	.2	122	25	14	4.0	--	.2		191	100		
S701		7.5	292	1.65	.33	.87	.06	.01	2.00	.52	.39	.06			29.0	191	0	0.9	
				57	11	30	2		67	17	13	2							
295/28E-31B03 M																			
/73 S701				30	5.0	20	2.1	.2	122	20	14	2.0	--	.2		177	94		
S701		7.4	277	1.50	.41	.87	.05	.01	2.00	.42	.39	.03			25.0	178	0	0.9	
				53	14	31	2		70	15	14	1							
295/28E-31B04 M																			
/73 S701				37	3.0	21	2.9	.6	131	25	15	1.0	--	.1		197	104		
S701		7.8	298	1.85	.25	.91	.07	.02	2.15	.52	.42	.02			26.0	196	0	0.9	
				60	8	30	2	1	69	17	13	1							
295/28E-31D01 M																			
/73 S701				43	7.0	24	2.8	.1	146	32	27	7.0	--	.2		243	138		
S701		7.1	382	2.15	.58	1.04	.07	.00	2.39	.67	.76	.11			28.0	243	17	0.9	
				56	15	27	2		61	17	19	3							

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD PH	LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER									B	F	TDS SUM	TH NCH	SAR	REM
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3		SIO2				
						MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER					
				CENTRAL VALLEY SAN JOAQUIN VALLEY																
	29S/28E-31F02	M																		
03/15/73	5701					46	6.0	23	3.0	.3	138	28	32	5.0	--	.1	240	140		
	5701			7.4	386	2.30	.49	1.00	.08	.01	2.26	.58	.90	.08		27.0	238	26	0.8	
						59	13	26	2		59	15	23	2						
	29S/28E-31G02	M																		
01/11/73	5701					19	2.0	26	1.9	.9	98	16	11	2.0	--	.2	148	56		
	5701			8.1	217	.95	.16	1.13	.05	.03	1.61	.33	.31	.03		20.0	147	0	1.5	
						41	7	49	2	1	70	14	13	1						
	29S/28E-31J02	M																		
01/11/73	5701					25	3.0	27	2.4	.6	111	19	13	3.0	--	.2	171	74		
	5701			7.9	254	1.25	.25	1.17	.06	.02	1.82	.40	.37	.05		22.0	170	0	1.4	
						46	9	43	2	1	68	15	14	2						
	29S/28E-31K02	M																		
06/07/73	5701					37	4.0	22	2.8	.1	132	27	17	6.0	--	.2	208	110		
	5701			7.1	316	1.85	.33	.96	.07	.00	2.16	.56	.48	.10		28.0	209	1	0.9	
						58	10	30	2		65	17	15	3						
	29S/28E-31Q03	M																		
04/11/73	5701					49	8.0	28	3.3	.3	158	38	34	7.0	--	.2	276	154		
	5701			7.2	437	2.45	.66	1.22	.08	.01	2.59	.79	.96	.11		29.0	274	26	1.0	
						56	15	28	2		58	18	22	2						
	29S/28E-32D01	M																		
06/07/73	5701					93	6.0	54	3.8	.2	75	187	77	6.0	--	.1	480	256		
	5701			7.6	764	4.64	.49	2.35	.10	.01	1.23	3.89	2.17	.10		16.0	480	195	1.5	
						61	6	31	1		17	53	29	1						
	29S/28E-32H01	M																		
08/15/73	5701					191	20	55	5.4	.2	170	328	130	24.0	--	.1	868	560		
	5701			7.3	1275	9.53	1.64	2.39	.14	.01	2.79	6.83	3.67	.39		29.0	866	419	1.0	
						70	12	17	1		20	50	27	3						
	29S/28E-32L01	M																		
07/17/73	5701					56	1.0	34	3.4	.5	79	71	56	11.0	--	.1	292	144		
	5701			8.0	479	2.79	.08	1.48	.09	.02	1.29	1.48	1.58	.18		20.0	292	78	1.2	
						63	2	33	2		28	33	35	4						
	29S/28E-32N01	M																		
06/28/73	5701					28	2.0	24	2.3	.8	96	25	22	3.0	--	.2	176	80		
	5701			8.1	273	1.40	.16	1.04	.06	.03	1.57	.52	.62	.05		22.0	176	0	1.2	
						53	6	39	2	1	56	19	22	2						
	29S/28E-32R01	M																		
05/14/73	5050		78.8F	7.4	460	37	8.9	30	--	0	110	--	40	6.6	.20	--		129		
0940	5050		26.0C	8.1	418	1.85	.73	1.31		.00	1.80		1.13	.11		--		39	1.1	
						48	19	34			59		37	4						
	29S/28E-32R02	M																		
03/14/73	5701					137	12	70	5.6	.3	107	289	101	25.0	--	.0	716	390		
	5701			7.7	1070	6.84	.99	3.05	.14	.01	1.75	6.02	2.85	.40		22.0	715	304	1.5	
						62	9	28	1		16	55	26	4						
	29S/28E-34J01	M																		
04/04/73	5701					198	4.0	180	8.0	.3	46	471	246	47.0	--	.2	1196	512		
	5701			7.9	1770	9.88	.33	7.83	.20	.01	.75	9.81	6.94	.76		16.0	1193	473	3.5	
						54	2	43	1		4	54	38	4						
06/07/73	5701					214	3.0	158	8.9	.1	41	465	260	50.0	--	.2	1198	548		
	5701			7.7	1836	10.68	.25	6.87	.23	.00	.67	9.68	7.33	.81		19.0	1198	513	2.9	
						59	1	38	1		4	52	40	4						
	29S/28E-35E03	M																		
04/11/73	5701					152	2.0	165	6.2	.3	43	375	214	38.0	--	.1	992	390		
	5701			7.9	1476	7.58	.16	7.18	.16	.01	.70	7.81	6.03	.61		16.0	990	352	3.6	
						50	1	48	1		5	52	40	4						
05/14/73	5050		77.0F	8.0	700	53	1.6	93	--	0	117	--	77	5.7	.10	--		138		
1020	5050		25.0C	7.3	733	2.64	.13	4.05		.00	1.92		2.17	.09		--		43	3.4	
						39	2	59			46		52	2						
	30S/27E-01B02	M																		
05/09/73	5701					25	2.0	19	1.8	.4	102	13	7.0	2.0	--	.2	142	68		
	5701			7.8	216	1.25	.16	.83	.05	.01	1.67	.27	.20	.03		24.0	144	0	1.0	
						55	7	36	2		77	12	9	1						5
	30S/27E-01G02	M																		
07/17/73	5701					69	9.0	43	3.4	.2	197	60	39	39.0	--	.1	389	210		
	5701			7.1	608	3.44	.74	1.87	.09	.01	3.23	1.25	1.10	.63		30.0	389	47	1.3	
						56	12	30	1		52	20	18	10						
	30S/27E-01J01	M																		
05/09/73	5701					37	4.0	21	2.4	.4	131	24	14	4.0	--	.2	194	108		
	5701			7.7	304	1.85	.33	.91	.06	.01	2.15	.50	.39	.06		24.0	195	1	0.9	
						59	10	29	2		69	16	13	2						
	30S/27E-01K01	M																		
04/11/73	5701					61	11	48	4.0	.3	217	52	36	29.0	--	.1	383	196		
	5701			7.1	593	3.04	.90	2.09	.10	.01	3.56	1.08	1.02	.47		32.0	380	19	1.5	
						50	15	34	2		58	18	17	8						
	30S/27E-01M01	M																		
07/17/73	5701					46	4.0	23	2.3	.2	148	29	18	13.0	--	.2	238	134		
	5701			7.3	364	2.30	.33	1.00	.06	.01	2.43	.60	.51	.21		29.0	237	10	0.9	
						62	9	27	2		65	16	14	6						
	30S/27E-02A01	M																		
06/07/73	5701					34	4.0	20	2.5	.2	124	18	15	6.0	--	.3	187	102		
	5701			7.3	289	1.70	.33	.87	.06	.01	2.03	.37	.42	.10		27.0	188	0	0.9	
						57	11	29	2		69	13	14	3						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE (MILLIGRAMS PER LITER) CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F / SIO2	TDS SUM	TH NCM	SAR	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY																
12/09/73	305/27E-02A02	M				31	3.0	20	2.8	.3	126	16	14	3.0	--	.3	179	92		
	5701					1.55	.25	.87	.07	.01	2.07	.33	.39	.05		26.0	178	0	0.9	
	5701		7.5	266		57	9	32	3		73	12	14	2						
08/15/73	305/27E-02D01	M				29	5.0	18	2.3	.1	100	18	26	2.0	--	.2	176	92		
	5701					1.45	.41	.78	.06	.00	1.64	.37	.73	.03		27.0	177	11	0.8	
	5701		7.3	277		54	15	29	2		59	13	26	1						
02/09/73	305/27E-02F01	M				35	4.0	22	3.0	.3	121	19	26	5.0	--	.2	201	106		
	5701					1.75	.33	.96	.08	.01	1.98	.40	.73	.08		26.0	200	5	0.9	
	5701		7.4	318		56	11	31	3		62	13	23	3						
03/15/73	305/27E-02H01	M				36	3.0	22	2.5	.3	129	24	15	9.0	--	.1	201	104		
	5701					1.80	.25	.96	.06	.01	2.11	.50	.42	.15		24.0	199	0	0.9	
	5701		7.4	315		59	8	31	2		66	16	13	5						
09/13/73	305/27E-02P01	M				42	4.0	26	2.2	.2	134	25	28	8.0	--	.2	228	120		
	5701					2.10	.33	1.13	.06	.01	2.20	.52	.79	.13		27.0	228	11	1.0	
	5701		7.3	363		58	9	31	2		60	14	22	4						
09/13/73	305/27E-02R01	M				46	8.0	27	2.3	.2	163	33	22	15.0	--	.2	262	148		
	5701					2.30	.66	1.17	.06	.01	2.67	.69	.62	.24		29.0	263	14	1.0	
	5701		7.3	422		55	16	28	1		63	16	15	6						
09/12/73	305/27E-11B01	M				38	3.0	22	2.2	.2	129	21	17	7.0	--	.1	201	106		
	5701					1.90	.25	.96	.06	.01	2.11	.44	.48	.11		27.0	201	2	0.9	
	5701		7.4	308		60	8	30	2		67	14	15	3						
08/14/73	305/27E-11D02	M				30	4.0	20	2.0	.3	119	21	16	2.0	--	.2	180	94		
	5701					1.50	.33	.87	.05	.01	1.95	.44	.45	.03		26.0	180	0	0.9	
	5701		7.6	281		55	12	32	2		68	15	16	1						
04/11/73	305/27E-11G01	M				40	.0	21	2.6	.3	131	23	15	4.0	--	.3	198	102		
	5701					2.00	.00	.91	.07	.01	2.15	.48	.42	.06		26.0	196	0	0.9	
	5701		7.7	300		67		31	2		69	15	13	2						
09/12/73	305/27E-11R01	M				51	8.0	30	2.6	.1	173	42	23	19.0	--	.1	239	162		
	5701					2.54	.66	1.31	.07	.00	2.84	.87	.65	.31		29.0	290	18	1.0	T
	5701		7.1	457		55	14	29	2		61	19	14	7						
04/11/73	305/27E-12C01	M				46	6.0	28	2.9	.3	165	34	20	10.0	--	.1	258	140		
	5701					2.30	.49	1.22	.07	.01	2.70	.71	.56	.16		28.0	256	4	1.0	
	5701		7.6	402		56	12	30	2		65	17	14	4						
08/14/73	305/27E-12L02	M				49	9.0	26	2.6	.3	173	34	21	11.0	--	.1	268	160		
	5701					2.45	.74	1.13	.07	.01	2.84	.71	.59	.18		30.0	268	17	0.9	
	5701		7.4	424		56	17	26	2		66	16	14	4						
08/14/73	305/27E-12R01	M				28	5.0	19	1.8	.2	114	19	12	4.0	--	.2	175	90		
	5701					1.40	.41	.83	.05	.01	1.87	.40	.34	.06		29.0	174	0	0.9	
	5701		7.5	262		52	15	31	2		70	15	13	2						
09/12/73	305/27E-13C01	M				50	6.0	29	2.4	.3	178	33	20	11.0	--	.1	267	148		
	5701					2.50	.49	1.26	.06	.01	2.92	.69	.56	.18		29.0	268	3	1.0	
	5701		7.4	416		58	11	29	1		67	16	13	4						
05/09/73	305/27E-13H01	M				31	2.0	19	1.3	.7	80	27	22	1.0	--	.1	163	83		
	5701					1.55	.16	.83	.03	.02	1.31	.56	.62	.02		23.0	166	19	0.9	
	5701		8.1	255		60	6	32	1	1	52	22	25	1						
02/09/73	305/27E-13H02	M				30	5.0	20	2.8	.6	131	17	12	4.0	--	.2	183	98		
	5701					1.50	.41	.87	.07	.02	2.15	.35	.34	.06		26.0	182	0	0.9	
	5701		7.9	274		53	14	31	2	1	74	12	12	2						
04/11/73	305/27E-14H02	M				34	.0	19	2.3	.6	118	17	12	1.0	--	.2	169	86		
	5701					1.70	.00	.83	.06	.02	1.93	.35	.34	.02		24.0	168	0	0.9	
	5701		7.8	254		66		32	2	1	73	13	13	1						
05/09/73	305/27E-23C02	M				40	3.0	21	2.3	.6	131	25	15	4.0	--	.2	198	113		
	5701					2.00	.25	.91	.06	.02	2.15	.52	.42	.06		24.0	199	4	0.9	
	5701		7.8	318		62	8	28	2	1	68	16	13	2						
03/14/73	305/27E-23C03	M				38	2.0	20	2.3	.3	131	25	14	3.0	--	.1	193	106		
	5701					1.90	.16	.87	.06	.01	2.15	.52	.39	.05		23.0	192	0	0.9	
	5701		7.7	305		64	5	29	2		69	17	13	2						
09/12/73	305/27E-23C04	M				40	4.0	21	2.1	.3	134	28	17	6.0	--	.1	212	116		
	5701					2.00	.33	.91	.05	.01	2.20	.58	.48	.10		29.0	213	6	0.8	
	5701		7.5	328		61	10	28	2		65	17	14	3						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
						MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER					
				CENTRAL VALLEY SAN JOAQUIN VALLEY																
	305/27E-23001	M																		
09/12/73	5701					38	6.0	22	2.2	.3	138	29	18	5.0	--	.1	215	120		
	5701			7.5	335	1.90	.49	.96	.06	.01	2.26	.60	.51	.08		26.0	214	6	0.9	
						56	14	28	2		65	17	15	2						
	305/27E-23002	M																		
09/12/73	5701					41	2.0	20	2.1	.4	131	27	14	3.0	--	.1	200	110		
	5701			7.6	312	2.05	.16	.87	.05	.01	2.15	.56	.39	.05		26.0	200	3	0.8	
						65	5	28	2		68	18	12	2						
	305/27E-27A01	M																		
04/25/73	5050		68 F	7.4	300	38	6.4	22	--	0	149	--	13	5.7	--	--		121		
1145	5050		20 C	8.0	345	1.90	.53	.96		.00	2.44		.37	.09		--		0	0.9	
						56	16	28			84		13	3						
	305/27E-27F01	M																		
04/25/73	5050		68 F	7.6	310	38	5.2	22	--	0	137	--	15	4.8	--	--		115		
1135	5050		20 C	8.0	339	1.90	.43	.96		.00	2.25		.42	.08		--		4	0.9	
						58	13	29			82		15	3						
	305/27E-28J01	M																		
04/25/73	5050		70 F	7.2	520	30	11	33	--	0	106	--	22	15.0	--	--		120		X
1105	5050		21 C	8.0	408	1.50	.90	1.44		.00	1.74		.62	.24		--		33	1.3	
						39	23	38			67		24	9						
	305/27E-32A01	M																		
04/25/73	5050		70 F	7.5	400	55	7.7	28	--	0	187	--	16	13.0	--	--		170		
1510	5050		21 C	7.9	466	2.74	.63	1.22		.00	3.06		.45	.21		--		16	0.9	
						60	14	27			82		12	6						
	305/27E-33B01	M																		
04/25/73	5050		65 F	7.2	370	44	8.4	25	--	0	158	--	18	3.6	--	--		145		
1010	5050		18 C	7.9	407	2.20	.69	1.09		.00	2.59		.51	.06		--		15	0.9	
						55	17	27			82		16	2						
	305/27E-35H02	M																		
04/25/73	5050		74 F	7.2	380	50	8.5	24	--	0	190	--	15	10.0	--	--		159		
1225	5050		23 C	8.0	435	2.50	.70	1.04		.00	3.11		.42	.16		--		5	0.8	
						59	17	25			84		11	4						
	305/28E-05R01	M																		
02/09/73	5701					59	9.0	33	3.8	.6	158	41	55	14.0	--	.1	320	186		
	5701			7.9	522	2.94	.74	1.44	.10	.02	2.59	.85	1.55	.23		25.0	318	54	1.1	
						56	14	28	2		49	16	30	4						
	305/28E-05C01	M																		
06/07/73	5701					62	6.0	29	2.6	.4	168	40	42	14.0	--	.2	305	180		
	5701			7.6	497	3.09	.49	1.26	.07	.01	2.75	.83	1.18	.23		26.0	305	41	0.9	
						63	10	26	1		55	17	24	5						
	305/28E-05E01	M																		
01/11/73	5701					47	7.0	26	3.5	.3	151	34	31	6.0	--	.2	256	148		
	5701			7.6	412	2.35	.58	1.13	.09	.01	2.47	.71	.87	.10		26.0	255	23	0.9	
						57	14	27	2		59	17	21	2						
	305/28E-05F01	M																		
02/09/73	5701					37	5.0	28	3.5	.6	133	27	24	9.0	--	.2	223	114		
	5701			8.0	347	1.85	.41	1.22	.09	.02	2.18	.56	.68	.15		22.0	221	3	1.1	
						52	11	34	3	1	61	16	19	4						
	305/28E-05K01	M																		
01/11/73	5701					40	3.0	30	3.5	.6	131	38	19	6.0	--	.1	227	112		
	5701			8.0	359	2.00	.25	1.31	.09	.02	2.15	.79	.54	.10		21.0	226	4	1.2	
						55	7	36	2	1	60	22	15	3						
	305/28E-05N01	M																		
02/09/73	5701					48	5.0	28	3.1	1.5	117	16	15	3.0	--	.2	196	70		E
	5701			8.3	257	2.40	.41	1.22	.08	.05	1.92	.33	.42	.05		18.0	195	42	1.0	C
						58	10	30	2	2	69	12	15	2						S
	305/28E-06C02	M																		
08/14/73	5701					44	8.0	25	2.6	.2	144	33	27	9.0	--	.1	247	142		
	5701			7.3	392	2.20	.66	1.09	.07	.01	2.36	.69	.76	.15		28.0	248	25	0.9	
						55	16	27	2		59	17	19	4						
	305/28E-06D03	M																		
04/11/73	5701					42	5.0	25	3.0	.3	136	28	32	4.0	--	.2	237	126		
	5701			7.3	374	2.10	.41	1.09	.08	.01	2.23	.58	.90	.06		29.0	235	14	1.0	
						57	11	30	2		59	15	24	2						
	305/28E-06G02	M																		
07/17/73	5701					54	5.0	25	2.9	.2	161	37	25	7.0	--	.2	264	156		
	5701			7.4	414	2.69	.41	1.09	.07	.01	2.64	.77	.71	.11		29.0	264	23	0.9	
						63	10	26	2		62	18	17	3						
	305/28E-06H02	M																		
03/14/73	5701					41	5.0	23	2.8	.3	136	29	20	10.0	--	.1	225	124		
	5701			7.4	351	2.05	.41	1.00	.07	.01	2.23	.60	.56	.16		26.0	224	11	0.9	
						58	12	28	2		63	17	16	4						
	305/28E-07B01	M																		
07/17/73	5701					46	2.0	21	2.2	.3	129	28	22	11.0	--	.1	224	124		
	5701			7.5	344	2.30	.16	.91	.06	.01	2.11	.58	.62	.18		28.0	224	17	0.8	
						67	5	27	2		60	17	18	5						
	305/28E-07C01	M																		
04/11/73	5701					37	4.0	23	2.8	.3	129	27	19	7.0	--	.2	215	110		
	5701			7.5	324	1.85	.33	1.00	.07	.01	2.11	.56	.54	.11		30.0	214	3	1.0	
						57	10	31	2		63	17	16	3						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR	REM
						MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER					
		CENTRAL VALLEY SAN JOAQUIN VALLEY																		
	305/28E-07E01	M																		
07/17/73	5701					41	3.0	21	2.3	.3	131	26	16	8.0	--	.2	210	114		
	5701			7.5	318	2.05	.25	.91	.06	.01	2.15	.54	.45	.13		29.0	211	7	0.9	
						63	8	28	2		66	16	14	4						
	305/28E-08B01	M																		
06/07/73	5701					74	12	54	3.9	.5	167	136	50	15.0	--	.1	452	236		
	5701			7.7	706	3.69	.99	2.35	.10	.02	2.74	2.83	1.41	.24		24.0	452	96	1.5	
						52	14	33	1		38	39	19	3						
	305/28E-08H01	M																		
05/14/73	5050		73.4F	7.8	325	35	6.9	31	--	0	120	--	26	8.5	.10	--		117		
1225	5050		23.0C	7.7	383	1.75	.57	1.35		.00	1.97		.73	.14		--		18	1.3	
						48	16	37			69		26	5						
	305/28E-08H02	M																		
03/14/73	5701					32	4.0	34	3.2	.6	121	27	27	15.0	--	.2	224	96		
	5701			8.0	358	1.60	.33	1.48	.08	.02	1.98	.56	.76	.24		20.0	222	0	1.5	
						46	9	42	2	1	56	16	21	7						
	305/28E-09Q01	M																		
04/24/73	5050		80 F	7.3	1000	60	22	148	--	0	362	--	78	88.0	--	--		242		
1515	5050		27 C	8.0	1120	2.99	1.81	6.44		.00	5.93		2.20	1.42		--		0	4.2	
						27	16	57			62		23	15						
	305/28E-11A01	M																		
05/15/73	5050		77.0F	7.4	1650	193	48	103	--	0	168	--	375	12.0	.10	--		680		
1315	5050		25.0C	7.5	1830	9.63	3.95	4.48		.00	2.75		10.58	.19		--		542	1.7	
						53	22	25			20		78	1						
	305/28E-11Q01	M																		
05/15/73	5050		77.0F	7.6	420	37	8.4	48	--	0	179	--	40	5.6	.10	--		128		
1215	5050		25.0C	7.8	483	1.85	.69	2.09		.00	2.93		1.13	.09		--		0	1.9	
						40	15	45			71		27	2						
	305/28E-12M02	M																		
05/15/73	5050		77.0F	7.4	2600	385	97	140	--	0	164	--	500	48.0	.20	--		1360		
1245	5050		25.0C	7.5	2990	19.21	7.98	6.09		.00	2.69		14.10	.77		--		1226	1.7	
						58	24	18			15		80	4						
	305/28E-13L01	M																		
05/15/73	5050		77.0F	7.4	410	37	9.2	48	--	0	206	--	20	2.8	.10	--		131		
1145	5050		25.0C	8.0	468	1.85	.76	2.09		.00	3.38		.56	.05		--		0	1.8	
						39	16	44			85		14	1						
	305/28E-14Q01	M																		
05/15/73	5050		78.8F	7.4	405	34	8.8	48	--	0	207	--	18	1.4	.10	--		120		
1200	5050		26.0C	8.0	442	1.70	.72	2.09		.00	3.39		.51	.02		--		0	1.9	
						38	16	46			86		13	1						
	305/28E-16N01	M																		
05/14/73	5050		73.4F	7.4	800	72	20	72	--	0	288	--	69	49.0	.20	--		262		
1315	5050		23.0C	7.8	829	3.59	1.64	3.13		.00	4.72		1.95	.79		--		26	1.9	
						43	20	37			63		26	11						
	305/28E-18B01	M																		
08/14/73	5701					42	9.0	25	2.4	.2	141	39	25	8.0	--	.2	249	142		
	5701			7.3	394	2.10	.74	1.09	.06	.01	2.31	.81	.71	.13		29.0	249	26	0.9	
						53	19	27	2		58	20	18	3						
	305/28E-18E01	M																		
03/14/73	5701					34	5.0	20	1.9	.3	138	11	14	6.0	--	.2	188	106		
	5701			7.5	303	1.70	.41	.87	.05	.01	2.26	.23	.39	.10		26.0	186	0	0.8	
						56	14	29	2		76	8	13	3						
	305/28E-18K01	M																		
09/12/73	5701					42	7.0	25	2.3	.4	138	37	24	6.0	--	.1	241	134		
	5701			7.6	375	2.10	.58	1.09	.06	.01	2.26	.77	.68	.10		29.0	241	21	0.9	
						55	15	28	2		59	20	18	3						
	305/28E-21M01	M																		
05/15/73	5050		68.0F	7.6	415	41	11	52	--	0	164	--	49	17.0	.10	--		148		X
0800	5050		20.0C	7.8	538	2.05	.90	2.26		.00	2.69		1.38	.27		--		13	1.9	
						39	17	43			62		32	6						
	305/28E-25G02	M																		
05/15/73	5050		75.2F	7.8	365	26	4.4	52	--	0	148	--	21	1.6	.30	--		83		
1030	5050		24.0C	7.8	404	1.30	.36	2.26		.00	2.43		.59	.03		--		0	2.5	
						33	9	58			80		19	1						
	305/28E-26A01	M																		
05/15/73	5050		73.4F	8.0	445	40	11	56	--	0	208	--	32	.0	.20	--		144		
1000	5050		23.0C	7.7	521	2.00	.90	2.44		.00	3.41		.90	.00		--		0	2.0	
						37	17	46			79		21							
	305/28E-26R01	M																		
05/15/73	5050		73.4F	7.4	900	85	22	87	--	0	230	--	124	9.4	.30	--		305		
0945	5050		23.0C	7.7	997	4.24	1.81	3.78		.00	3.77		3.50	.15		--		114	2.2	
						43	18	38			51		47	2						
	305/28E-28A03	M																		
05/15/73	5050		75.2F	7.6	1140	120	53	106	--	0	149	--	416	6.5	.10	--		520		X
0830	5050		24.0C	7.6	1470	5.99	4.36	4.61		.00	2.44		11.73	.10		--		396	2.0	
						40	29	31			17		82	1						
	305/28E-28D01	M																		
04/25/73	5050		66 F	7.3	1150	32	28	145	--	0	242	--	95	4.0	--	--		196		
1620	5050		19 C	8.0	1040	1.60	2.30	6.31		.00	3.97		2.68	.06		--		0	4.5	
						16	23	62			59		40	1						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									B	F	TDS SUM	TH NCM	SAR	REM
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3		SIO2				
		CENTRAL VALLEY																		
		SAN JOAQUIN VALLEY																		
		30S/28E-28R03	M																	
05/15/73	5050		75.2F	7.4	800	73	20	71	--	0	279	--	65	7.5	.20	--		263		
0845	5050		24.0C	8.1	818	3.64	1.64	3.09		.00	4.57		1.83	.12		--		36	1.9	
						43	20	37			70		28	2						
		30S/28E-34R01	M																	
05/15/73	5050		73.4F	7.8	900	87	25	71	--	0	210	--	120	6.1	.20	--		320		
0900	5050		23.0C	8.1	951	4.34	2.06	3.09		.00	3.44		3.38	.10		--		148	1.7	
						46	22	33			50		49	1						
		30S/28E-35L01	M																	
05/15/73	5050		71.6F	7.6	600	55	15	53	--	0	201	--	50	4.6	.20	--		198		
0920	5050		22.0C	8.2	630	2.74	1.23	2.31		.00	3.29		1.41	.07		--		34	1.6	
						44	20	37			69		30	1						
		31S/27E-03K02	M																	
04/25/73	5050		73 F	7.8	340	44	6.2	27	--	0	163	--	16	6.9	--	--		135		
1350	5050		23 C	8.0	395	2.20	.51	1.17		.00	2.67		.45	.11		--		2	1.0	
						57	13	30			83		14	3						
		31S/27E-05P01	M																	
04/25/73	5050		70 F	7.8	240	27	1.4	26	--	0	119	--	8.9	2.4	--	--		75		
1445	5050		21 C	7.9	267	1.35	.12	1.13		.00	1.95		.25	.04		--		0	1.3	
						52	5	43			87		11	2						
		PANOCHE VALLEY																		
		15S/10E-21C01	M																	
05/23/73	5050		87.0F	7.4	1550	93	52	213	--	0	397	--	110	2.0	7.90	--		446		
1630	5050		30.5C	8.2	1700	4.64	4.28	9.27		.00	6.51		3.10	.03		--		121	4.4	
						26	24	51			68		32							
		15S/10E-21L01	M																	
05/23/73	5050		79.0F	7.1	1600	148	79	172	--	0	278	--	54	14.0	1.90	--		694		
1615	5050		26.1C	8.2	1840	7.39	6.50	7.48		.00	4.56		1.52	.23		--		467	2.8	
						35	30	35			72		24	4						
		15S/10E-24N01	M																	
05/23/73	5050		72.0F	7.3	1325	120	53	126	--	0	248	--	58	28.0	1.50	--		517		
1545	5050		22.2C	8.1	1430	5.99	4.36	5.48		.00	4.06		1.64	.45		--		315	2.4	
						38	28	35			66		27	7						
		15S/11E-29E01	M																	
05/23/73	5050		83.0F	7.4	1250	98	59	102	--	0	216	--	115	19.0	1.80	--		486		
1445	5050		28.3C	8.1	1340	4.89	4.85	4.44		.00	3.54		3.24	.31		--		310	2.0	
						34	34	31			50		46	4						
		15S/11E-30M01	M																	
05/23/73	5050		73.0F	7.6	1350	111	57	127	--	0	253	--	49	19.0	1.60	--		511		
1515	5050		22.8C	8.2	1420	5.54	4.69	5.52		.00	4.15		1.38	.31		--		304	2.4	
						35	30	35			71		24	5						
	5-24	SOUAW VALLEY																		
		13S/24E-11E51	M																	
04/18/73	5050					17	21	12	--	0	169	--	4.9	9.9	--	--		128		
1315	5050			8.1	289	.85	1.73	.52		.00	2.77		.14	.16		--		0	0.5	
						27	56	17			90		5	5						
		13S/24E-13R01	M																	
04/18/73	5050					42	20	45	--	0	184	--	73	7.6	--	--		186		
1150	5050			8.1	567	2.10	1.64	1.96		.00	3.02		2.06	.12		--		36	1.4	
						37	29	34			58		40	2						
		13S/24E-14J51	M																	
04/18/73	5050					34	9.7	63	--	0	152	--	79	15.0	--	--		125		
	5050			7.5	569	1.70	.80	2.74		.00	2.49		2.23	.24		--		1	2.5	
						32	15	52			50		45	5						
		13S/25E-19G01	M																	
04/18/73	5050		66 F	7.1	380	35	24	17	--	0	242	--	8.9	3.4	--	--		185		
1100	5050		19 C	8.2	414	1.75	1.97	.74		.00	3.97		.25	.05		--		0	0.5	
						39	44	17			93		6	1						
		13S/25E-35Q01	M																	
04/17/73	5050		79 F	7.3	520	47	19	29	--	0	250	--	17	22.0	--	--		194		
1320	5050		26 C	7.5	508	2.35	1.56	1.26		.00	4.10		.48	.35		--		0	0.9	
						45	30	24			83		10	7						
		14S/25E-02R01	M																	
04/17/73	5050		72 F	6.8	360	34	12	19	--	0	155	--	12	23.0	--	--		136		
1345	5050		22 C	7.0	368	1.70	.99	.83		.00	2.54		.34	.37		--		8	0.7	
						48	28	24			78		10	11						
		14S/25E-03M02	M																	
04/17/73	5050		74 F	7.0	450	46	15	14	--	0	195	--	9.2	33.0	--	--		178		
1450	5050		23 C	7.9	421	2.30	1.23	.61		.00	3.20		.26	.53		--		17	0.5	
						56	30	15			80		7	13						
		14S/25E-09C01	M																	
04/17/73	5050		70 F	7.0	500	38	17	33	--	0	203	--	11	43.0	--	--		165		
1100	5050		21 C	7.1	485	1.90	1.40	1.44		.00	3.33		.31	.69		--		0	1.1	
						40	30	30			77		7	16						
		14S/25E-16P02	M																	
04/17/73	5050		70 F	6.8	500	38	16	35	--	0	141	--	19	64.0	--	--		159		
1000	5050		21 C	7.6	483	1.90	1.32	1.52		.00	2.31		.54	1.03		--		46	1.2	
						40	28	32			60		14	27						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	SIO2	TDS SUM	TM NCM	SAR	REM
		CENTRAL VALLEY KERN RIVER VALLEY																		
	25S/33E-09G01 M				27	4.0	17	--	0	130	--	3.5	1.2	--	.7			84		
07/13/73	5121		7.7	233	1.35	.33	.74		.00	2.13		.10	.02		--			0	0.8	
	5050				56	14	31			95		4	1							
	25S/33E-15G01 M				26	4.6	28	--	0	102	--	15	19.0	--	--			84		
05/09/73	5119		7.3	313	1.30	.38	1.22		.00	1.67		.42	.31		--			1	1.3	
	5050				45	13	42			70		18	13							
	25S/33E-15G02 M				20	4.1	10	--	0	98	--	3.6	.0	--	.2			68		
07/13/73	5121		7.1	184	1.00	.34	.44		.00	1.61		.10	.00		--			0	0.5	
	5050				56	19	25			94		6								
	25S/33E-27K01 M	68 F	7.0	1550	66	28	268	--	0	458	--	79	25.0	--	--			281		
04/24/73	5050	20 C	8.0	1660	3.29	2.30	11.66		.00	7.51		2.23	.40		--			0	7.0	
0900	5050				19	13	68			74		22	4							
	25S/33E-28R01 M	70 F	7.2	600	56	20	61	--	0	324	--	20	.0	--	--			221		
04/23/73	5050	21 C	8.1	683	2.79	1.64	2.65		.00	5.31		.56	.00		--			0	1.8	
1630	5050				39	23	37			90		10								
	25S/33E-31J01 M	74 F	7.4	270	31	8.9	25	--	0	145	--	7.8	12.0	--	--			114		X
04/23/73	5050	23 C	7.4	358	1.55	.73	1.09		.00	2.38		.22	.19		--			0	1.0	
1545	5050				46	22	32			85		8	7							
	25S/33E-32N01 M				54	21	37	--	9.0	267	--	15	5.7	--	--			220		
05/09/73	5119		8.5	583	2.69	1.73	1.61		.30	4.38		.42	.09		--			0	1.1	
	5050				45	29	27													
	26S/33E-26H01 M				67	36	55	--	0	383	--	34	17.0	--	--			314		
05/09/73	5119		8.1	856	3.34	2.96	2.39		.00	6.28		.96	.27		--			1	1.3	
	5050				38	34	28			84		13	4							
	26S/33E-30J01 M				15	4.5	41	--	0	95	--	10	26.0	--	--			56		
04/23/73	5121		7.3	278	.75	.37	1.78		.00	1.56		.28	.42		--			0	2.4	
	5050				26	13	61			69		12	19							
	26S/33E-30Q01 M				17	5.7	86	--	0	176	--	21	8.1	--	--			66		
04/23/73	5121		7.5	421	.85	.47	3.74		.00	2.88		.59	.13		--			0	4.6	
	5050				17	9	74			80		16	4							
	26S/33E-30R01 M				13	2.6	47	--	0	104	--	13	19.0	--	--			43		
04/23/73	5121		7.5	276	.65	.21	2.04		.00	1.70		.37	.31		--			0	3.1	
	5050				22	7	70			71		16	13							
	26S/33E-31A01 M				14	3.2	106	--	0	238	--	30	3.3	--	--			48		
04/23/73	5121		7.9	539	.70	.26	4.61		.00	3.90		.85	.05		--			0	6.6	
	5050				13	5	83			81		18	1							
	26S/33E-31K01 M	116 F			3.1	.0	139	--	0	278	--	42	.0	--	8.4			7		
07/13/73	5121	47 C	8.1	637	.15	.00	6.05		.00	4.56		1.18	.00		--			0	21.7	
	5050				2		98			79		21								
	26S/33E-31K02 M	128 F			4.7	.0	147	--	0	302	--	38	.0	--	8.3			10		
07/13/73	5121	53 C	8.2	662	.23	.00	6.39		.00	4.95		1.07	.00		--			0	18.7	
	5050				3		97			82		18								
	26S/34E-14J01 M	65 F	7.4	760	92	21	53	--	0	428	--	18	9.6	--	--			318		
04/24/73	5050	18 C	8.0	794	4.59	1.73	2.31		.00	7.01		.51	.15		--			0	1.3	
1000	5050				53	20	27			91		7	2							
					90	19	46	--	0	422	--	16	8.4	--	--			305		
05/09/73	5119		8.1	779	4.49	1.56	2.00		.00	6.92		.45	.14		--			0	1.2	
	5050				56	19	25			92		6	2							
	26S/34E-22E01 M				43	9.9	51	--	0	223	--	22	6.1	--	--			148		
05/09/73	5119		8.0	533	2.15	.81	2.22		.00	3.65		.62	.10		--			0	1.8	
	5050				42	16	43			84		14	2							
	26S/34E-30A01 M				87	20	41	--	0	179	--	28	56.0	--	--			298		
05/09/73	5119		8.1	782	4.34	1.64	1.78		.00	2.93		.79	.90		--			153	1.0	
	5050				56	21	23			63		17	19							
	26S/35E-04Q01 M	70 F	7.2	520	57	24	34	--	0	229	--	20	40.0	--	--			240		
04/24/73	5050	21 C	8.2	605	2.84	1.97	1.48		.00	3.75		.56	.65		--			53	1.0	
1115	5050				45	31	24			76		11	13							
	26S/35E-18N01 M				66	24	66	--	0	349	--	27	10.0	--	--			266		
05/09/73	5119		8.1	805	3.29	1.97	2.87		.00	5.72		.76	.16		--			0	1.8	
	5050				40	24	35			86		11	2							

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP		FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									B	F SIO2	TDS SUM	TH NCH	SAR	REM
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3						
		CENTRAL VALLEY																			
		KERN RIVER VALLEY																			
	26S/35E-19H01	M																			
04/24/73	5050		66	F	7.8	725	80	22	54	--	0	289	--	37	24.0	--	--		290		
1045	5050		19	C	7.9	790	3.99	1.81	2.35		.00	4.74		1.04	.39		--		53	1.4	
							49	22	29			77		17	6						
	27S/32E-01R01	M																			
04/23/73	5121						52	9.6	26	--	0	219	--	9.2	.6	--	--		169		
	5050				7.6	442	2.59	.79	1.13		.00	3.59		.26	.01		--		0	0.9	
							57	18	25			93		7							
	27S/32E-12P01	M																			
05/09/73	5119						62	31	31	--	0	278	--	18	3.0	--	--		281		
	5050				8.1	682	3.09	2.55	1.35		.00	4.56		.51	.05		--		54	0.8	
							44	36	19			89		10	1						
	27S/33E-06E01	M																			
05/09/73	5119						50	16	28	--	0	258	--	9.3	3.9	--	--		189		
	5050				8.2	504	2.50	1.32	1.22		.00	4.23		.26	.06		--		0	0.9	
							50	26	24			93		6	1						
		CUMMINGS VALLEY																			
	32S/31E-23P01	M																			
05/07/73	5647		63	F			35	13	22	--	0	172	--	12	24.0	.00	--		141		
1600	5050		17	C	7.9	380	1.75	1.07	.96		.00	2.82		.34	.39		--		0	0.8	
							46	28	25			79		10	11						
	32S/31E-24M01	M																			
05/04/73	5647		64	F			37	12	30	--	0	197	--	14	18.0	.00	--		143		
1340	5050		18	C	8.2	418	1.85	.99	1.31		.00	3.23		.39	.29		--		0	1.1	
							45	24	32			83		10	7						
	32S/31E-25P02	M																			
05/04/73	5647		61	F			64	17	33	--	0	240	--	19	12.0	.00	--		231		
1400	5050		16	C	8.1	596	3.19	1.40	1.44		.00	3.93		.54	.19		--		33	0.9	
							53	23	24			84		12	4						
	32S/32E-18H03	M																			
05/04/73	5647		59	F			38	16	30	--	0	235	--	16	.0	.00	--		161		
1100	5050		15	C	8.2	445	1.90	1.32	1.31		.00	3.85		.45	.00		--		0	1.0	
							42	29	29			90		10							
	32S/32E-19J01	M																			
05/04/73	5647		58	F			92	26	37	--	0	277	--	25	6.5	.10	--		335		
1140	5050		14	C	8.1	796	4.59	2.14	1.61		.00	4.54		.71	.10		--		110	0.9	
							55	26	19			85		13	2						
	32S/32E-21L01	M																			
05/07/73	5647		65	F			11	2.8	43	--	0	88	--	9.2	.9	.20	--		39		
1615	5050		18	C	8.2	298	.55	.23	1.87		.00	1.44		.26	.01		--		0	3.0	
							21	9	71			84		15	1						
	32S/32E-30P01	M																			
05/04/73	5647		62	F			66	20	34	--	0	279	--	25	22.0	.00	--		246		
1415	5050		17	C	8.2	644	3.29	1.64	1.48		.00	4.57		.71	.35		--		18	0.9	
							51	26	23			81		13	6						
	32S/32E-33D01	M																			
05/07/73	5647		62	F			53	22	16	--	0	245	--	7.1	21.0	.00	--		221		
1030	5050		17	C	8.3	487	2.64	1.81	.70		.00	4.02		.20	.34		--		22	0.5	
							51	35	14			88		4	7						
	12N/16W-31M01	S																			
05/07/73	5647		61	F			61	36	40	--	.4	343	--	30	36.0	.00	--		300		
1515	5050		16	C	8.3	728	3.04	2.96	1.74		.01	5.62		.85	.58		--		19	1.0	
							39	38	22												
	12N/16W-33B01	S																			
05/07/73	5647		62	F			21	29	27	--	.4	226	--	20	11.0	.00	--		172		
1505	5050		17	C	8.3	454	1.05	2.38	1.17		.01	3.70		.56	.18		--		0	0.9	
							23	52	25												
	12N/16W-35B01	S																			
05/07/73	5647		60	F			83	28	23	--	0	277	--	26	2.8	.00	--		324		
1440	5050		16	C	8.0	707	4.14	2.30	1.00		.00	4.54		.73	.05		--		95	0.6	
							56	31	13			85		14	1						
		TEHACHAPI VALLEY																			
	32S/32E-12P01	M																			
05/07/73	5647		60	F			58	12	37	--	0	243	--	16	10.0	.10	--		196		
1340	5050		16	C	8.2	530	2.89	.99	1.61		.00	3.98		.45	.16		--		0	1.2	
							53	18	29			87		10	3						
	32S/32E-23J01	M																			
05/07/73	5647		60	F			86	28	40	--	0	360	--	45	4.1	.10	--		330		
1345	5050		16	C	8.1	795	4.29	2.30	1.74		.00	5.90		1.27	.07		--		35	1.0	
							52	28	21			81		18	1						
	32S/32E-25N01	M																			
05/03/73	5647		64	F			50	17	45	--	0	208	--	22	.6	.00	--		196		
1600	5050		18	C	8.2	601	2.50	1.40	1.96		.00	3.41		.62	.01		--		25	1.4	
							43	24	33			84		15							
	32S/32E-27K01	M																			
05/07/73	5647		57	F			75	22	20	--	0	288	--	9.9	3.9	.00	--		277		
1400	5050		14	C	8.2	583	3.74	1.81	.87		.00	4.72		.28	.06		--		42	0.5	
							58	28	14			93		6	1						

TABLE E-1 (Continued)

MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	FIELD LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: B	F	SIO2	TDS SUM	TH NCM	SAR	REM
		CENTRAL VALLEY TEHACHAPI VALLEY																		
	325/33E-19F01	M																		
05/07/73	5647	63	F		49	12	31	--	0	224	--	12	8.2	.00	--		171			
1310	5050	17	C	8.3	464	2.45	.99	1.35	.00	3.67		.34	.13		--		0	1.0		
						51	21	28		89		8	3							
	325/33E-19Q01	M																		
05/03/73	5647	58	F		44	16	28	--	0	223	--	11	8.6	.00	--		175			
1530	5050	14	C	8.2	451	2.20	1.32	1.22	.00	3.65		.31	.14		--		0	0.9		
						46	28	26		89		8	3							
	325/33E-22E04	M																		
05/03/73	5647	64	F		40	9.0	25	--	0	147	--	18	17.0	.00	--		137			
1310	5050	18	C	8.2	399	2.00	.74	1.09	.00	2.41		.51	.27		--		17	0.9		
						52	19	28		76		16	8							
	325/33E-22J01	M																		
05/03/73	5647	62	F		70	15	27	--	0	192	--	38	29.0	.00	--		235			
1430	5050	17	C	8.2	588	3.49	1.23	1.17	.00	3.15		1.07	.47		--		79	0.8		
						59	21	20		67		23	10							
	325/33E-26P01	M																		
05/03/73	5647	58	F		68	12	32	--	0	235	--	17	24.0	.00	--		218			
1415	5050	14	C	8.2	564	3.39	.99	1.39	.00	3.85		.48	.39		--		27	0.9		
						59	17	24		82		10	8							
	325/33E-28A01	M																		
05/03/73	5647	66	F		39	16	29	--	.6	202	--	12	18.0	.00	--		164			
1515	5050	19	C	8.4	442	1.95	1.32	1.26	.02	3.31		.34	.29		--		0	1.0		
						43	29	28												
	325/33E-29Q01	M																		
05/03/73	5647	63	F		32	9.5	20	--	0	136	--	12	24.0	.00	--		119			
1545	5050	17	C	8.1	327	1.60	.78	.87	.00	2.23		.34	.39		--		8	0.8		
						49	24	27		75		11	13							
	325/34E-30M01	M																		
05/03/73	5647	63	F		70	16	39	--	0	223	--	30	15.0	.00	--		241			
1400	5050	17	C	8.2	630	3.49	1.32	1.70	.00	3.65		.85	.24		--		58	1.1		
						54	20	26		77		18	5							
	325/34E-34B01	M																		
05/03/73	5647	61	F		38	13	72	--	.4	248	--	13	32.0	.40	--		147			
1330	5050	16	C	8.3	584	1.90	1.07	3.13	.01	4.06		.37	.52		--		0	2.6		
						31	18	51												

TABLE E-2

MINOR ELEMENT ANALYSES OF GROUND WATER

This table presents data resulting from the collection and analyses of ground water by various agencies and laboratories. The code numbers listed below will identify the agency that collected the sample and the laboratory that conducted the analysis:

5050	California Department of Water Resources
5060	California Department of Health
5119	Kern County Health Department
5121	Kern County Water Agency
5123	Tulare County Farm Advisor
5200	City of Fresno
5701	California Water Service Company
5702	Individual Owner
5720	Bakeman Water Company
5801	Braun, Skaggs, Kevorkian and Simons Laboratory
5802	Twining Laboratory

Abbreviations

D	Dissolved
T	Total
REM	Remarks

TABLE E-2

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		13S/19E-28C01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-02G01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-03H02		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-10B01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-10D01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-11C02		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-11L01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-13C02		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-13E01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-13H01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-14B01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-14M01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-15L01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-16G01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-17F01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-18E01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-19A01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-19C01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-20E01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-20H01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-20N01		M								
08/15/73	S200					--	--	--	--	--	--	
	S802				--	--	--	0.02 T	0.01 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		13S/20E-20R01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-21K02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-22A01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-23R01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-23J01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-23D01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-26D01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-27C01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-27J01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-28E01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-28N01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-28R01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-29K01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-30B01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-32D01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-32L02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-33J01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-34R01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-34M01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-35D01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		13S/20E-35M02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		135/20E-36P01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		135/21E-04N01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-04P01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-05J01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-05Q01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-07G02		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-08E01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-08J01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-17F01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-18H01		M								
11/16/72	5801					--	--	--	--	--	--	
	5801				--	--	--	0.00 T	0.00 T	--	--	
		135/21E-21P01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		135/21E-29A01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		135/21E-31A02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		135/21E-31E02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		135/21E-31R01		M								
09/24/73	5720					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		135/21E-32N02		M								
09/24/73	5720					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-01G01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-01J01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-02J02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-02Q01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-03C02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		145/20E-03J01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-03M01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-04F01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-08H01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-08R01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-09C01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-09L02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-10M01		M								
08/15/73	5200					--	--	--	--	--	--	
	5801				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-10R01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-11F01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-14F01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-16A01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/20E-22L01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/21E-06Q02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/21E-07H02		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		145/21E-07M01		M								
08/15/73	5200					--	--	--	--	--	--	
	5802				--	--	--	0.02 T	0.01 T	--	--	
		155/22E-31A01		M								
05/23/73	5701					0.00 T	0.002 T	0.00 T	0.000 T	0.0009 T	--	
	5701				0.0020 T	0.000 T	--	0.00 T	0.00 T	0.0020 T	0.02 T	
		155/22E-32L01		M								
06/18/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		165/22E-05C01		M								
06/18/73	5701					0.0 T	0.002 T	0.01 T	0.000 T	0.0004 T	--	
	5701				--	0.000 T	--	0.00 T	0.01 T	0.0040 T	0.00 T	
		165/22E-05C02		M								
05/23/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		165/22E-05E01		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CONSTITUENTS IN MILLIGRAMS PER LITER							
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		16S/22E-05E02		M								
08/21/73	S701					0.0 T	--	0.04 T	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	0.05 T	
		16S/22E-05M01		M								
05/21/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.01 T	0.00 T	--	--	
		16S/22E-06G01		M								
07/17/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		16S/22E-06K01		M								
06/18/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		16S/22E-06Q01		M								
07/17/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		16S/22E-07A01		M								
08/21/73	S701					0.0 T	--	0.00 T	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	0.00 T	
		16S/22E-07C02		M								
08/21/73	S701					0.0 T	--	0.00 T	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	0.02 T	
		18S/21E-13R01		M								
10/18/72	S702					--	--	--	--	--	--	
	S802				--	--	--	0.06 T	0.000 T	--	--	
		18S/24E-25L01		M								
05/23/73	S701					0.0 T	0.001 T	0.00 T	0.000 T	0.0011 T	--	
	S701				0.0020 T	0.000 T	--	0.00 T	0.00 T	0.0016 T	0.09 T	
		18S/24E-27R02		M								
05/17/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/24E-35C02		M								
04/12/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/24E-35C03		M								
09/06/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/24E-35N01		M								
02/28/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.01 T	0.00 T	--	--	
		18S/24E-36C01		M								
06/15/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/24E-36E01		M								
07/17/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/24E-36K01		M								
07/17/73	S701					0.0 T	0.001 T	0.00 T	0.000 T	0.0008 T	--	
	S701				0.0000 T	0.000 T	--	0.02 T	0.00 T	0.0000 T	0.00 T	
		18S/24E-36Q01		M								
06/15/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-14N02		M								
02/25/73	S701					0.0 T	0.001 T	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
04/12/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-19N01		M								
05/23/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-19Q01		M								
07/17/73	S701					0.0 T	--	--	--	--	--	
	S701				--	--	--	0.00 T	0.00 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		18S/25E-20E01		M								
02/21/73	5701					0.0 T	0.000 T	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-27N01		M								
01/23/73	5701					0.00 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	
		18S/25E-27P01		M								
06/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-28D01		M								
05/23/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-28L01		M								
01/23/73	5701					0.00 T	--	--	--	--	--	
	5701				0.000 T	--	--	0.00 T	0.00 T	--	--	
		18S/25E-29B01		M								
03/20/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.05 T	0.00 T	--	--	
		18S/25E-29C01		M								
03/20/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.01 T	0.00 T	--	--	
		18S/25E-29Q01		M								
05/23/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-29R01		M								
02/25/73	5701					0.0 T	0.000 T	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-30F01		M								
03/20/73	5701					0.0 T	--	0.00 T	0.000 T	0.0006 T	--	
	5701				--	0.0000 T	--	0.00 T	0.01 T	0.0004 T	0.00 T	
		18S/25E-30H01		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	
		18S/25E-30H02		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.05 T	0.00 T	--	--	
		18S/25E-30N01		M								
08/21/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-30P01		M								
08/21/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-30R02		M								
05/23/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-31B01		M								
04/12/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-31B03		M								
03/20/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.01 T	0.00 T	--	--	
		18S/25E-31E01		M								
09/06/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-31K01		M								
08/21/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-31R01		M								
02/21/73	5701					0.0 T	0.001 T	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		18S/25E-32E01		M								
01/23/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.01 T	0.00 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		185/25E-32E02 M										
01/23/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	
		185/25E-32G01 M										
09/06/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		185/25E-32K01 M										
08/21/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		195/24E-01G01 M										
04/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		195/24E-02H02 M										
02/21/73	5701					0.0 T	0.001 T	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		195/25E-05B01 M										
06/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.01 T	--	--	
		195/25E-06E01 M										
08/21/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.04 T	0.00 T	--	--	
		195/25E-06M01 M										
02/25/73	5701					0.0 T	0.001 T	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		195/25E-07A01 M										
06/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		235/32E-14001 M										
04/23/73	5050			70 F		--	--	--	--	--	--	
1725	5050		310	7.0	0.00 O	--	--	--	--	--	--	
		245/24E-09002 M										
10/24/72	5123					--	--	--	--	--	--	
	5060				0.13	--	--	--	--	--	--	
12/20/72	5123					--	--	--	--	--	--	
	5060				0.11	--	--	--	--	--	--	
		295/27E-23H01 M										
03/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-24N01 M										
09/12/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-25B02 M										
09/13/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-25D02 M										
06/07/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-25G01 M										
05/09/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-25G02 M										
06/07/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-25R01 M										
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-26J01 M										
03/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/27E-35A02 M										
08/14/73	5701					0.0 T	0.000 T	0.00 T	0.000 T	0.0004 T	--	
	5701				0.0014 T	0.000 T	--	0.00 T	0.00 T	0.0017 T	0.01 T	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		29S/27E-35E01		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/27E-35G01		M								
08/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/27E-36H01		M								
08/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/27E-36K01		M								
06/07/73	5701					0.1 T	0.000 T	0.00 T	0.000 T	0.0002 T	--	
	5701				--	0.000 T	--	0.00 T	0.00 T	0.0010 T	0.00 T	
		29S/27E-36K02		M								
02/09/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-16E01		M								
07/17/73	5701					0.1 T	0.000 T	0.00 T	0.000 T	0.0006 T	--	
	5701				0.0005 T	0.000 T	--	0.05 T	0.10 T	0.0014 T	0.01 T	
		29S/28E-16M01		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.03 T	--	--	
		29S/28E-16Q01		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.15 T	--	--	
		29S/28E-16R01		M								
06/07/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.11 T	--	--	
		29S/28E-17R01		M								
05/11/73	5701					0.0 T	0.000 T	0.02 T	0.000 T	0.0120 T	--	
	5701				0.0000 T	0.000 T	--	0.03 T	0.42 T	0.0000 T	0.02 T	
		29S/28E-19J02		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.01 T	--	--	
		29S/28E-19J03		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.02 T	--	--	
		29S/28E-19L01		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-19N02		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-19Q01		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-20A01		M								
02/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.06 T	--	--	
		29S/28E-20G02		M								
04/11/73	5701					0.0 T	0.000 T	--	--	0.0000 T	--	
	5701				0.001 T	--	--	0.00 T	0.09 T	0.0002 T	--	
		29S/28E-20M01		M								
03/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.01 T	--	--	
		29S/28E-20L01		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.04 T	--	--	
		29S/28E-21C01		M								
02/09/73	5701					0.00 T	--	--	--	--	--	
	5701				--	--	--	0.12 T	0.02 T	--	--	
		29S/28E-21D01		M								
08/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CONSTITUENTS IN MILLIGRAMS PER LITER							
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		295/28E-21E01		M								
02/09/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.04 T	0.01 T	--	--	
		295/28E-21G01		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	
		295/28E-21M01		M								
06/07/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.01 T	--	--	
		295/28E-29001		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-29L01		M								
03/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.02 T	--	--	
		295/28E-29P01		M								
07/17/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-29001		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.03 T	--	--	
		295/28E-30A01		M								
03/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-30F02		M								
06/07/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-30G01		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-30H02		M								
02/09/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	
		295/28E-30K02		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-30002		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-30004		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-31803		M								
07/17/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-31804		M								
02/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	
		295/28E-31001		M								
08/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-31F02		M								
03/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-31G02		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-31J02		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		295/28E-31K02		M								
06/07/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		29S/28E-31Q03		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-32D01		M								
06/07/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.01 T	0.00 T	--	--	
		29S/28E-32H01		M								
08/15/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	
		29S/28E-32L01		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-32N01		M								
06/28/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-32R02		M								
03/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		29S/28E-34J01		M								
04/04/73	5701					0.2 T	0.000 T	0.00 T	0.00 T	--	--	
	5701				0.006 T	0.000 T	--	0.08 T	0.00 T	--	0.05 T	
06/07/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.01 T	0.01 T	0.0065 T	--	
		29S/28E-35E03		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.05 T	0.01 T	--	--	
		30S/27E-01B02		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/27E-01G02		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/27E-01J01		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/27E-01K01		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.03 T	0.00 T	--	--	
		30S/27E-01M01		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/27E-02A01		M								
06/07/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/27E-02A02		M								
02/09/73	5701					0.2 T	--	0.00 T	0.00 T	--	--	
	5701				--	0.000 T	--	0.00 T	0.00 T	--	0.00 T	
		30S/27E-02D01		M								
08/15/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/27E-02F01		M								
02/09/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.08 T	0.00 T	--	--	
		30S/27E-02H01		M								
03/15/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.01 T	--	--	
		30S/27E-02P01		M								
09/13/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/27E-02R01		M								
09/13/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.02 T	0.00 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		305/27E-11R01		M								
09/12/73	5701					0.0 T	--	0.00 T	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	0.02 T	
		305/27E-11D02		M								
08/14/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-11G01		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-11R01		M								
09/12/73	5701					0.0 T	0.001 T	0.00 T	0.000 T	0.0005 T	--	
	5701				0.0000 T	0.000 T	--	0.00 T	0.00 T	0.0000 T	0.09 T	
		305/27E-12C01		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-12L02		M								
08/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-12R01		M								
08/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-13C01		M								
09/12/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-13M01		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.03 T	--	--	
		305/27E-13M02		M								
02/09/73	5701					0.1 T	--	0.01 T	0.00 T	--	--	
	5701				--	0.000 T	--	0.00 T	0.00 T	--	0.00 T	
		305/27E-14H02		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-23C02		M								
05/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-23C03		M								
03/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/27E-23C04		M								
09/12/73	5701					0.0 T	--	0.00 T	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	0.10 T	
		305/27E-23D01		M								
09/12/73	5701					0.0 T	--	0.00 T	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	0.02 T	
		305/27E-23D02		M								
09/12/73	5701					0.0 T	--	0.00 T	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	0.00 T	
		305/28E-05R01		M								
02/09/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/28E-05C01		M								
06/07/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/28E-05E01		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/28E-05F01		M								
02/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		305/28E-05K01		M								
01/11/73	5701					--	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		30S/28E-05N01		M								
02/09/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-06C02		M								
08/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-06G03		M								
04/11/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-06G02		M								
07/17/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-06M02		M								
03/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-07B01		M								
07/17/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-07C01		M								
04/11/73	5701					0.2 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-07E01		M								
07/17/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-08B01		M								
06/07/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.01 T	0.00 T	--	--	
		30S/28E-08M02		M								
03/14/73	5701					0.0 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-18B01		M								
08/14/73	5701					0.1 T	--	--	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	--	
		30S/28E-18E01		M								
03/14/73	5701					0.0 T	0.001 T	0.01 T	0.000 T	0.0014 T	--	
	5701				0.001 T	0.0000 T	--	0.00 T	0.00 T	0.0008 T	0.03 T	
		30S/28E-18K01		M								
09/12/73	5701					0.0 T	--	0.00 T	--	--	--	
	5701				--	--	--	0.00 T	0.00 T	--	0.04 T	
		S-25		KERN RIVER VALLEY								
		25S/33E-09G01		M								
07/13/73	5121					--	--	--	--	--	--	
	5050				0.02 0	--	--	--	--	--	--	
		25S/33F-15G01		M								
05/09/73	5119					--	--	--	--	--	--	
	5050				0.00 0	--	--	--	--	--	--	
		25S/33E-15G02		M								
07/13/73	5121					--	--	--	--	--	--	
	5050				0.00 0	--	--	--	--	--	--	
		25S/33E-27K01		M								
04/24/73	5050			68.0F		--	--	--	--	--	--	
0900	5050		1550	7.0	0.00 0	--	--	--	--	--	--	
		25S/33E-28R01		M								
04/23/73	5050			70.0F		--	--	--	--	--	--	
1630	5050		600	7.2	0.00 0	--	--	--	--	--	--	
		25S/33E-31J01		M								
04/23/73	5050			74.0F		--	--	--	--	--	--	
1545	5050		270	7.4	0.00 0	--	--	--	--	--	--	
		25S/33E-32N01		M								
05/09/73	5119					--	--	--	--	--	--	
	5050				0.00 0	--	--	--	--	--	--	
		26S/33E-26M01		M								
05/09/73	5119					--	--	--	--	--	--	
	5050				0.00 0	--	--	--	--	--	--	

TABLE E-2 (Continued)

MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCM EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC	REM
				CENTRAL VALLEY KERN RIVER VALLEY								
		26S/33E-30J01 M										
04/23/73	5121 5050				0.01 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/33E-30Q01 M										
04/23/73	5121 5050				0.01 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/33E-30R01 M										
04/23/73	5121 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/33E-31A01 M										
04/23/73	5121 5050				0.06 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/33E-31K01 M										
07/13/73	5121 5050			116 F	0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/33F-31K02 M										
07/13/73	5121 5050			128 F	0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/34E-14J01 M										
04/24/73 1000	5050 5050		760	65.0F 7.4	0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
05/09/73	5119 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/34E-22E01 M										
05/09/73	5119 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/34E-30A01 M										
05/09/73	5119 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/35E-04Q01 M										
04/24/73 1115	5050 5050		520	70.0F 7.2	0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/35E-18N01 M										
05/09/73	5119 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		26S/35E-19H01 M										
04/24/73 1045	5050 5050		725	66.0F 7.8	0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		27S/32E-01R01 M										
04/23/73	5121 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		27S/32E-12P01 M										
05/09/73	5119 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	
		27S/33E-06E01 M										
05/09/73	5119 5050				0.00 D	-- --	-- --	-- --	-- --	-- --	-- --	

TABLE E-3

SUPPLEMENTAL MINOR ELEMENT ANALYSES OF GROUND WATER

Table E-3 presents analyses which do not appear on Tables E-1 and E-2. Listed below are definitions of abbreviations and codes used in this table:

Codes

5701 California Water Service Company

Abbreviations

T Total

REM Remarks

TABLE E-3

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	CONSTITUENTS IN MILLIGRAMS PER LITER ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		15S/22E-31A01		M								
05/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.20 T	--	
		15S/22E-32L01		M								
06/18/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.20 T	--	
		16S/22E-05C01		M								
06/18/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.18 T	--	
		16S/22E-05C02		M								
05/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.10 T	--	
		16S/22E-05E01		M								
07/17/73	5701					--	--	--	0.003 T	--	--	
	5701				--	--	--	--	--	0.24 T	--	
		16S/22E-05E02		M								
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.16 T	--	
		16S/22E-05M01		M								
05/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.15 T	--	
		16S/22E-06G01		M								
07/17/73	5701					--	--	--	0.002 T	--	--	
	5701				--	--	--	--	--	0.24 T	--	
		16S/22E-06K01		M								
06/18/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.25 T	--	
		16S/22E-06Q01		M								
07/17/73	5701					--	--	--	0.005 T	--	--	
	5701				--	--	--	--	--	0.29 T	--	
		16S/22E-07A01		M								
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.19 T	--	
		16S/22E-07C02		M								
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.11 T	--	
		18S/24E-25L01		M								
05/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		18S/24E-27R02		M								
05/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.16 T	--	
		18S/24E-35C02		M								
04/12/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.43 T	--	
		18S/24E-35C03		M								
09/06/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.33 T	--	
		18S/24E-35N01		M								
02/28/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.20 T	--	
		18S/24E-36C01		M								
06/15/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.14 T	--	
		18S/24E-36E01		M								
07/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.23 T	--	
		18S/24E-36K01		M								
07/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	
		18S/24E-36Q01		M								
06/15/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.35 T	--	

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
CENTRAL VALLEY SAN JOAQUIN VALLEY												
18S/25E-14N02 M												
02/25/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.20 T	--	
04/12/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	
18S/25E-19N01 M												
05/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.16 T	--	
18S/25E-19Q01 M												
07/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
18S/25E-20E01 M												
02/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.26 T	--	
18S/25E-27N01 M												
01/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.19 T	--	
18S/25E-27P01 M												
06/15/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.12 T	--	
18S/25E-28Q01 M												
05/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.15 T	--	
18S/25E-28L01 M												
01/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.30 T	--	
18S/25E-29R01 M												
03/20/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.19 T	--	
18S/25E-29C01 M												
03/20/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.13 T	--	
18S/25E-29Q01 M												
05/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
18S/25E-29R01 M												
02/25/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.23 T	--	
18S/25E-30E01 M												
03/20/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.19 T	--	
18S/25E-30H01 M												
07/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.32 T	--	
18S/25E-30H02 M												
07/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.34 T	--	
18S/25E-30N01 M												
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.17 T	--	
18S/25E-30P01 M												
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.42 T	--	
18S/25E-30R02 M												
05/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.25 T	--	
18S/25E-31B01 M												
04/12/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.24 T	--	
18S/25E-31B03 M												
03/20/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.26 T	--	

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	CONSTITUENTS IN MILLIGRAMS PER LITER ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		185/25E-31E01		M								
09/06/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		185/25E-31K01		M								
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.15 T	--	
		185/25E-31R01		M								
02/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.24 T	--	
		185/25E-32E01		M								
01/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.28 T	--	
		185/25E-32E02		M								
01/23/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.28 T	--	
		185/25E-32G01		M								
09/06/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	
		185/25E-32K01		M								
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.17 T	--	
		195/24E-01G01		M								
04/14/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.41 T	--	
		195/24E-02H02		M								
02/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.35 T	--	
		195/25E-05B01		M								
06/15/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.24 T	--	
		195/25E-06E01		M								
08/21/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.12 T	--	
		195/25E-06M01		M								
02/25/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	
		195/25E-07A01		M								
06/15/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.56 T	--	
		295/27E-23H01		M								
03/14/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	
		295/27E-24N01		M								
09/12/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.14 T	--	
		295/27E-25B02		M								
09/13/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.18 T	--	
		295/27E-25D02		M								
06/07/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
		295/27E-25G01		M								
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.14 T	--	
		295/27E-25G02		M								
06/07/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	
		295/27E-25R01		M								
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.33 T	--	
		295/27E-26J01		M								
03/15/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		29S/27E-35A02	M									
08/14/73	S701					--	--	--	0.005 T	--	--	
	5701				--	--	--	--	--	0.30 T	--	
		29S/27E-35E01	M									
04/11/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	0.25 T	--	
		29S/27E-35G01	M									
08/15/73	5701					--	--	--	0.003 T	--	--	
	5701				--	--	--	--	--	0.18 T	--	
		29S/27E-36M01	M									
08/15/73	5701					--	--	--	0.015 T	--	--	
	5701				--	--	--	--	--	0.43 T	--	
		29S/27E-36K01	M									
06/07/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	
		29S/27E-36K02	M									
02/09/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		29S/28E-16E01	M									
07/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		29S/28E-16M01	M									
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.42 T	--	
		29S/28E-16Q01	M									
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.51 T	--	
		29S/28E-16R01	M									
06/07/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.63 T	--	
		29S/28E-17R01	M									
05/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.37 T	--	
		29S/28E-19J02	M									
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		29S/28E-19J03	M									
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
		29S/28E-19L01	M									
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.14 T	--	
		29S/28E-19N02	M									
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.33 T	--	
		29S/28E-19Q01	M									
04/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
		29S/28E-20A01	M									
02/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.48 T	--	
		29S/28E-20G02	M									
04/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.60 T	--	
		29S/28E-20H01	M									
03/14/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	
		29S/28E-20L01	M									
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.41 T	--	
		29S/28E-21C01	M									
02/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.57 T	--	

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		29S/28E-21D01		M								
08/14/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.37 T	--	
		29S/28E-21E01		M								
02/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	
		29S/28E-21G01		M								
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.54 T	--	
		29S/28E-21M01		M								
06/07/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.34 T	--	
		29S/28E-29D01		M								
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.31 T	--	
		29S/28E-29L01		M								
03/14/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.33 T	--	
		29S/28E-29P01		M								
07/17/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.45 T	--	
		29S/28E-29Q01		M								
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.12 T	--	
		29S/28E-30A01		M								
03/15/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.19 T	--	
		29S/28E-30F02		M								
06/07/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		29S/28E-30G01		M								
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.35 T	--	
		29S/28E-30H02		M								
02/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		29S/28E-30K02		M								
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.34 T	--	
		29S/28E-30Q02		M								
07/17/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	0.24 T	--	
		29S/28E-30Q04		M								
07/17/73	5701					--	--	--	0.007 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
		29S/28E-31B03		M								
07/17/73	5701					--	--	--	0.008 T	--	--	
	5701				--	--	--	--	--	0.26 T	--	
		29S/28E-31B04		M								
02/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.35 T	--	
		29S/28E-31D01		M								
08/14/73	5701					--	--	--	0.009 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		29S/28E-31F02		M								
03/15/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	
		29S/28E-31G02		M								
01/11/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.25 T	--	
		29S/28E-31J02		M								
01/11/73	5701					--	--	--	0.002 T	--	--	
	5701				--	--	--	--	--	0.28 T	--	

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		29S/28E-31K02		M								
06/07/73	5701					--	--	--	0.008 T	--	--	
	5701				--	--	--	--	--	0.24 T	--	
		29S/28E-31Q03		M								
04/11/73	5701					--	--	--	0.011 T	--	--	
	5701				--	--	--	--	--	0.30 T	--	
		29S/28E-32Q01		M								
06/07/73	5701					--	--	--	0.002 T	--	--	
	5701				--	--	--	--	--	1.08 T	--	
		29S/28E-32M01		M								
08/15/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	1.64 T	--	
		29S/28E-32L01		M								
07/17/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.78 T	--	
		29S/28E-32N01		M								
06/28/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.29 T	--	
		29S/28E-32R02		M								
03/14/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	1.44 T	--	
		29S/28E-34J01		M								
04/04/73	5701					--	--	--	0.014 T	--	--	
	5701				--	--	--	--	--	2.36 T	--	
06/07/73	5701					--	--	--	0.014 T	--	--	
	5701				--	--	--	--	--	2.68 T	--	
		29S/28E-35E03		M								
04/11/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	1.48 T	--	
		30S/27E-01B02		M								
05/09/73	5701					--	--	--	0.002 T	--	--	
	5701				--	--	--	--	--	0.17 T	--	
		30S/27E-01G02		M								
07/17/73	5701					--	--	--	0.016 T	--	--	
	5701				--	--	--	--	--	0.47 T	--	
		30S/27E-01J01		M								
05/09/73	5701					--	--	--	0.006 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
		30S/27E-01K01		M								
04/11/73	5701					--	--	--	0.020 T	--	--	
	5701				--	--	--	--	--	0.49 T	--	
		30S/27E-01M01		M								
07/17/73	5701					--	--	--	0.014 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	
		30S/27E-02A01		M								
06/07/73	5701					--	--	--	0.005 T	--	--	
	5701				--	--	--	--	--	0.18 T	--	
		30S/27E-02A02		M								
02/09/73	5701					--	--	--	0.006 T	--	--	
	5701				--	--	--	--	--	0.29 T	--	
		30S/27E-02D01		M								
08/15/73	5701					--	--	--	0.005 T	--	--	
	5701				--	--	--	--	--	0.20 T	--	
		30S/27E-02E01		M								
02/09/73	5701					--	--	--	0.006 T	--	--	
	5701				--	--	--	--	--	0.31 T	--	
		30S/27E-02M01		M								
03/15/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	0.29 T	--	
		30S/27E-02P01		M								
09/13/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.26 T	--	

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
				CENTRAL VALLEY SAN JOAQUIN VALLEY								
		305/27E-02R01		M								
09/13/73	5701					--	--	--	0.008 T	--	--	
	5701				--	--	--	--	--	0.36 T	--	
		305/27F-11B01		M								
09/12/73	5701					--	--	--	0.002 T	--	--	
	5701				--	--	--	--	--	0.18 T	--	
		305/27E-11D02		M								
08/14/73	5701					--	--	--	0.006 T	--	--	
	5701				--	--	--	--	--	0.31 T	--	
		305/27E-11G01		M								
04/11/73	5701					--	--	--	0.011 T	--	--	
	5701				--	--	--	--	--	0.28 T	--	
		305/27F-11R01		M								
09/12/73	5701					--	--	--	0.009 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	
		305/27E-12C01		M								
04/11/73	5701					--	--	--	0.018 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	
		305/27E-12L02		M								
08/14/73	5701					--	--	--	0.012 T	--	--	
	5701				--	--	--	--	--	0.39 T	--	
		305/27F-12R01		M								
08/14/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
		305/27E-13C01		M								
09/12/73	5701					--	--	--	0.006 T	--	--	
	5701				--	--	--	--	--	0.27 T	--	
		305/27E-13M01		M								
05/09/73	5701					--	--	--	0.000 T	--	--	
	5701				--	--	--	--	--	0.20 T	--	
		305/27E-13M02		M								
02/09/73	5701					--	--	--	0.008 T	--	--	
	5701				--	--	--	--	--	0.28 T	--	
		305/27E-14M02		M								
04/11/73	5701					--	--	--	0.008 T	--	--	
	5701				--	--	--	--	--	0.20 T	--	
		305/27E-23C02		M								
05/09/73	5701					--	--	--	0.008 T	--	--	
	5701				--	--	--	--	--	0.28 T	--	
		305/27E-23C03		M								
03/14/73	5701					--	--	--	0.010 T	--	--	
	5701				--	--	--	--	--	0.29 T	--	
		305/27E-23C04		M								
09/12/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.18 T	--	
		305/27E-23001		M								
09/12/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.21 T	--	
		305/27E-23002		M								
09/12/73	5701					--	--	--	0.004 T	--	--	
	5701				--	--	--	--	--	0.22 T	--	
		305/28E-05B01		M								
02/09/73	5701					--	--	--	0.008 T	--	--	
	5701				--	--	--	--	--	0.55 T	--	
		305/28E-05C01		M								
06/07/73	5701					--	--	--	0.006 T	--	--	
	5701				--	--	--	--	--	0.33 T	--	
		305/28E-05E01		M								
01/11/73	5701					--	--	--	0.002 T	--	--	
	5701				--	--	--	--	--	0.47 T	--	
		305/28E-05F01		M								
02/09/73	5701					--	--	--	0.006 T	--	--	
	5701				--	--	--	--	--	0.38 T	--	

TABLE E-3 (Continued)

SUPPLEMENTAL MINOR ELEMENT ANALYSIS OF GROUND WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ALUMINUM	CONSTITUENTS IN MILLIGRAMS PER LITER ANTIMONY BERYLLIUM	BISMUTH COBALT	GALLIUM GERMANIUM	LITHIUM MOLYBDENUM	NICKEL STRONTIUM	TITANIUM VANADIUM	REM
					CENTRAL VALLEY SAN JOAQUIN VALLEY							
		30S/28E-05K01		M								
01/11/73	S701					--	--	--	0.002 T	--	--	
	S701				--	--	--	--	--	0.35 T	--	
		30S/28E-05N01		M								
02/09/73	S701					--	--	--	0.002 T	--	--	
	S701				--	--	--	--	--	0.23 T	--	
		30S/28E-06C02		M								
08/14/73	S701					--	--	--	0.014 T	--	--	
	S701				--	--	--	--	--	0.40 T	--	
		30S/28E-06D03		M								
04/11/73	S701					--	--	--	0.014 T	--	--	
	S701				--	--	--	--	--	0.35 T	--	
		30S/28E-06G02		M								
07/17/73	S701					--	--	--	0.012 T	--	--	
	S701				--	--	--	--	--	0.36 T	--	
		30S/28E-06M02		M								
03/14/73	S701					--	--	--	0.012 T	--	--	
	S701				--	--	--	--	--	0.30 T	--	
		30S/28E-07B01		M								
07/17/73	S701					--	--	--	0.012 T	--	--	
	S701				--	--	--	--	--	0.29 T	--	
		30S/28E-07C01		M								
04/11/73	S701					--	--	--	0.015 T	--	--	
	S701				--	--	--	--	--	0.32 T	--	
		30S/28E-07E01		M								
07/17/73	S701					--	--	--	0.012 T	--	--	
	S701				--	--	--	--	--	0.32 T	--	
		30S/28E-08B01		M								
06/07/73	S701					--	--	--	0.012 T	--	--	
	S701				--	--	--	--	--	0.56 T	--	
		30S/28E-08M02		M								
03/14/73	S701					--	--	--	0.008 T	--	--	
	S701				--	--	--	--	--	0.29 T	--	
		30S/28E-18B01		M								
08/14/73	S701					--	--	--	0.012 T	--	--	
	S701				--	--	--	--	--	0.31 T	--	
		30S/28E-18E01		M								
03/14/73	S701					--	--	--	0.012 T	--	--	
	S701				--	--	--	--	--	0.30 T	--	
		30S/28E-18K01		M								
09/12/73	S701					--	--	--	0.004 T	--	--	
	S701				--	--	--	--	--	0.18 T	--	

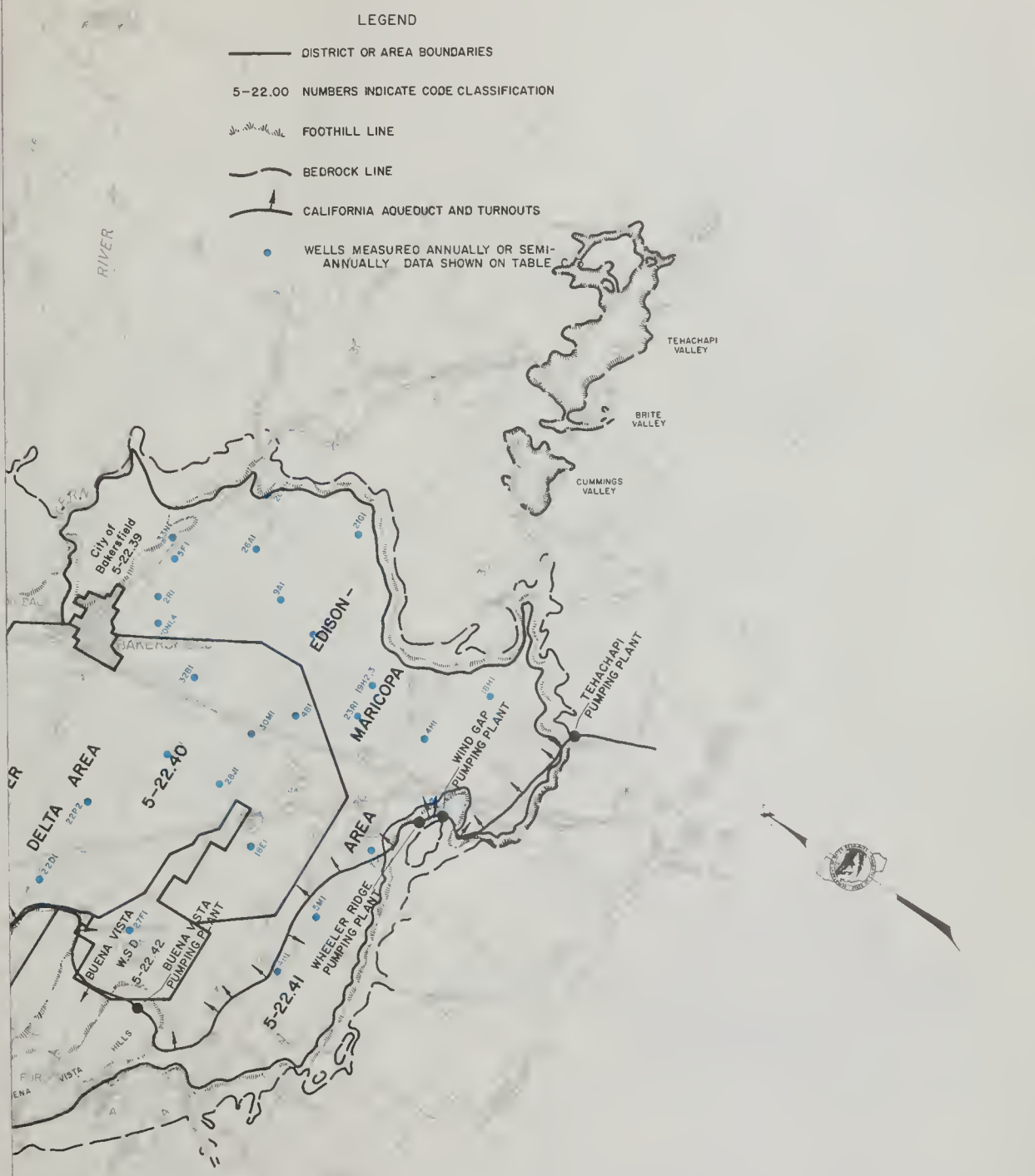
APPENDIX F

WASTE WATER DATA

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

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

653 950 750 8-74 OSP



STATE OF CALIFORNIA
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DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN DISTRICT

HYDROLOGIC DATA 1973

GROUND WATER AREAS AND SELECTED OBSERVATION WELLS

SCALE OF MILES
6 0 6 12

LEGEND
DISTRICT OR AREA BOUNDARIES
5-22.00 NUMBERS INDICATE CODE CLASSIFICATION
FOOTHILL LINE
BEDROCK LINE
CALIFORNIA AQUEDUCT AND TURNOUTS
WELLS MEASURED ANNUALLY OR SEMI-ANNUALLY DATA SHOWN ON TABLE
TRACY AREA 5-22.04
DELTA-MENDOTA
OAKDALE I.D. 5-22.06
MODESTO I.D. 5-22.07
TURLOCK I.D. 5-22.08
MERCED I.D. 5-22.09
MERCED BOTTOMS 5-22.14
SAN LUIS CANAL CO. 5-22.49
POSO S.C.D. 5-22.48
CHOWCHILLA W.D. 5-22.12
WEST CHOWCHILLA-MADERA AREA 5-22.11
MADERA I.D. 5-22.13
FRESNO I.D. 5-22.15
FRESNO SLOUGH AREA 5-22.17
CONSOLIDATED I.D. 5-22.18
LOWER KINGS RIVER AREA 5-22.20
ALTA I.D. 5-22.19
KAWEAH DELTA W.C.D. 5-22.24
TULARE I.D. 5-22.23
LINDMORE I.D. 5-22.29
LOWER TULE RIVER I.D. 5-22.30
PIXLEY I.D. 5-22.33
DELANO-EARLIMART I.D. 5-22.35
ALPAUGH-ALLENSWORTH AREA 5-22.34
CORCORAN I.D. 5-22.46
SOUTHERN SAN JOAQUIN M.U.D. 5-22.36
NORTH KERN W.S.D. 5-22.37
SHAFTER-WASCO I.D. 5-22.38
SEMITROPIC W.S.D. 5-22.43
TULARE LAKE-NURON AREA
LOST HILLS AREA 5-22.45
AVENAL-McKITTRICK AREA 5-22.44
KERN RIVER DELTA AREA 5-22.40
EDISON-MARICOPA AREA 5-22.41
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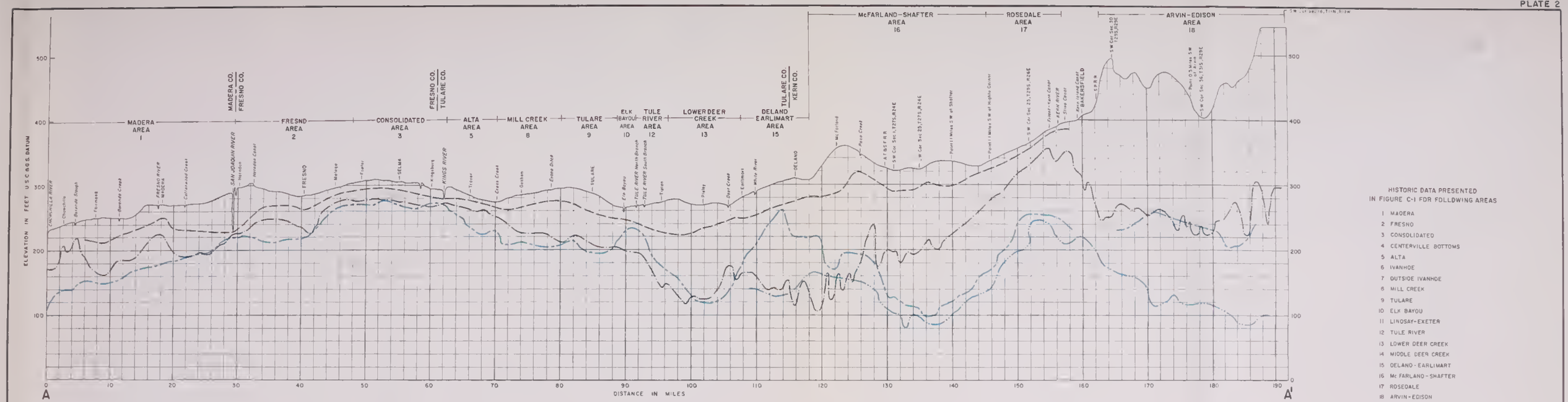
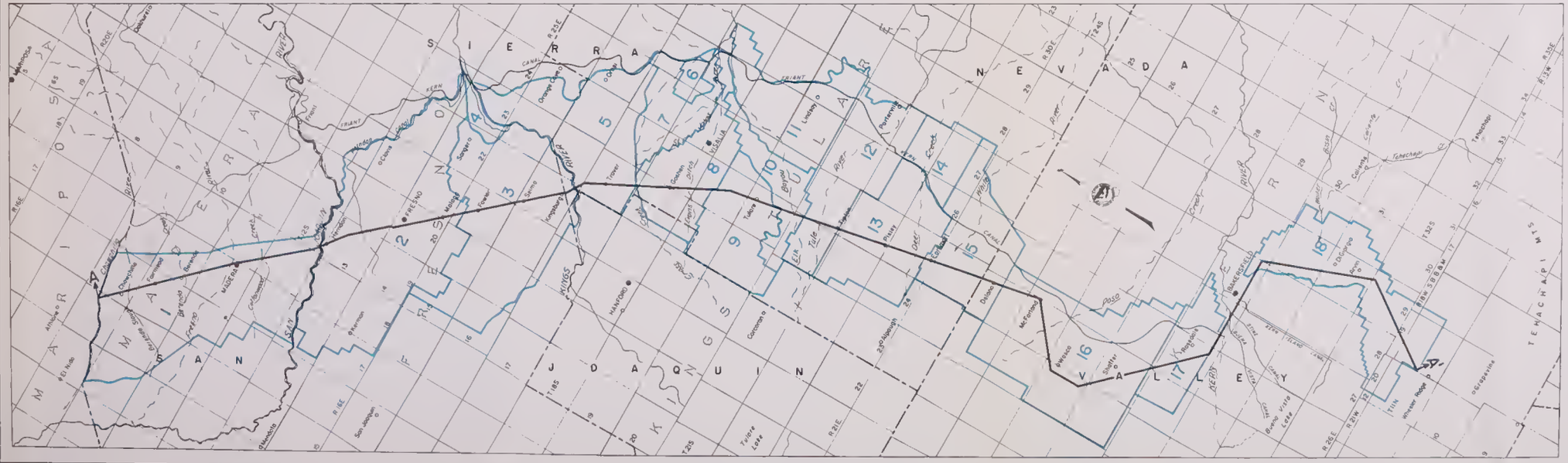
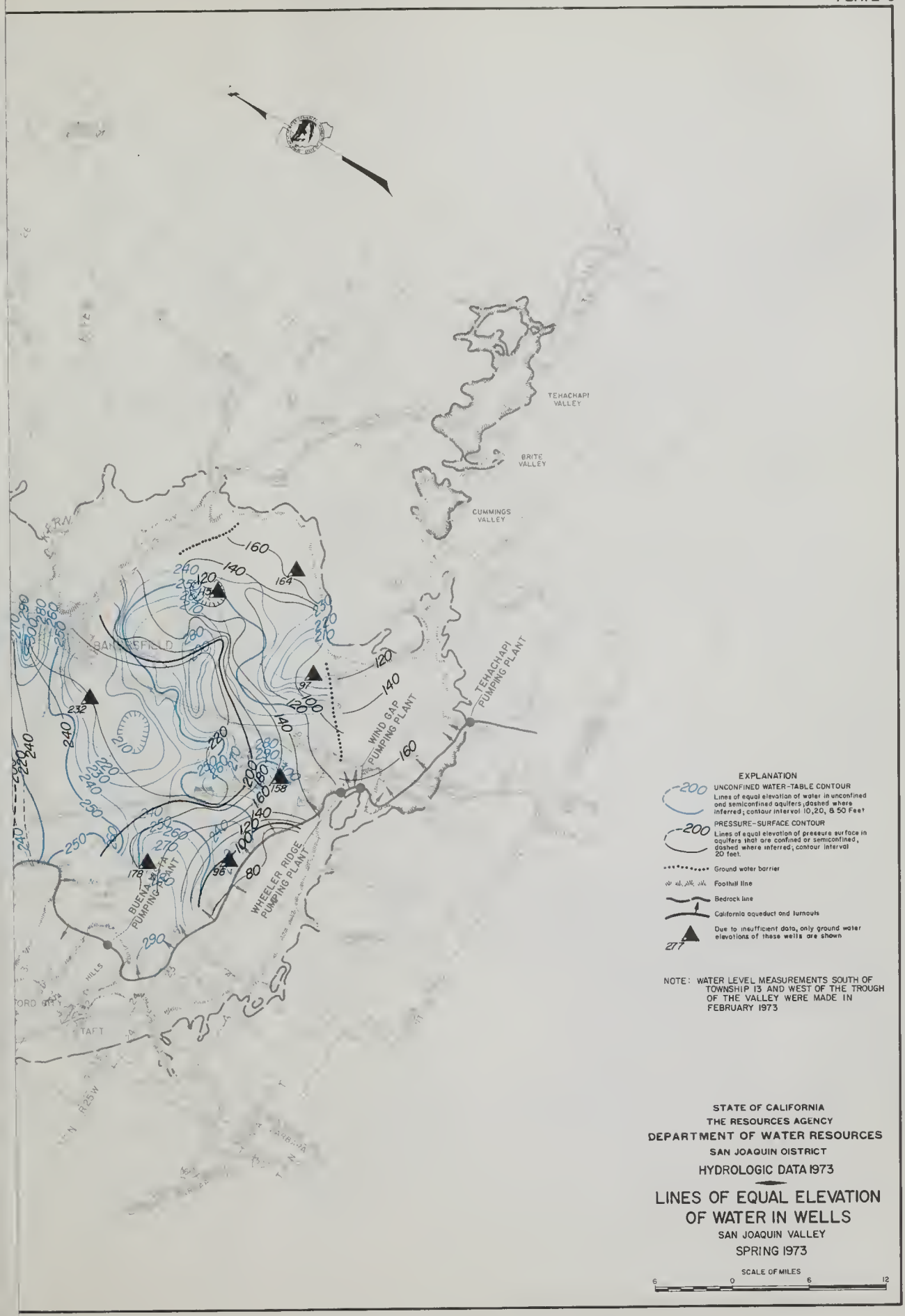


HISTORIC DATA PRESENTED IN FIGURE C-1 FOR FOLLOWING AREAS

1 MADERA
2 FRESNO
3 CONSOLIDATED
4 CENTERVILLE BOTTOMS
5 ALTA
6 IVANHOE
7 OUTSIDE IVANHOE
8 MILL CREEK
9 TULARE
10 ELK BAYOU
11 LINDSAY-EXETER
12 TULE RIVER
13 LOWER DEER CREEK
14 MIDDLE DEER CREEK
15 DELANO-EARLIMART
16 Mc FARLAND-SHAFTER
17 ROSEDALE
18 ARVIN-EDISON


SIERRA NEVADA
MADERA
FRESNO
KINGS
TULARE
KERN
SAN JOAQUIN VALLEY
MADERA
FRESNO
HANFORD
BAKERSFIELD
Mariposa
Oakhurst
Coarsegold
Chowchilla
Dos Palos
Los Banos
Firebaugh
Mendota
Coalinga
Lemoore
Corcoran
Lindsay
Porterville
Delano
McFarland
Wasco
Shafter
Taft
Maricopa
Arvin
Tehachapi
Caliente
Taylor Lake
Buena Vista Lake
Kern Lake
Tulare Lake
Mount Poso
Mount Vision
Mount Adelaide
Mount Bright
Mount Dorothy
Mount Gordon
Mount Lucy
Mount Mabel
Mount Pinchot
Mount Sherman
Mount Tom
Mount Wilson
Mount Zeus
Mount Ruskin
Mount Sibley
Mount Stanford
Mount Tyndall
Mount Whitney
Mount Williamson
Mount Langley
Mount Muir
Mount Russell


TEHACHAPI VALLEY
BRITE VALLEY
CUMMINGS VALLEY
BAKERSFIELD
TEHACHAPI PUMPING PLANT
WIND GAP PUMPING PLANT
WHEELER RIDGE PUMPING PLANT
BUENA VISTA PUMPING PLANT
TAFT
HILLS
EXPLANATION
200
UNCONFINED WATER-TABLE CONTOUR
Lines of equal elevation of water in unconfined and semiconfined aquifers; dashed where inferred; contour interval 10, 20, & 50 Feet
200
PRESSURE-SURFACE CONTOUR
Lines of equal elevation of pressure surface in aquifers that are confined or semiconfined, dashed where inferred; contour interval 20 feet.
Ground water barrier
Foothill line
Bedrock line
California aqueduct and turnouts
277
Due to insufficient data, only ground water elevations of these wells are shown
NOTE: WATER LEVEL MEASUREMENTS SOUTH OF TOWNSHIP 13 AND WEST OF THE TROUGH OF THE VALLEY WERE MADE IN FEBRUARY 1973
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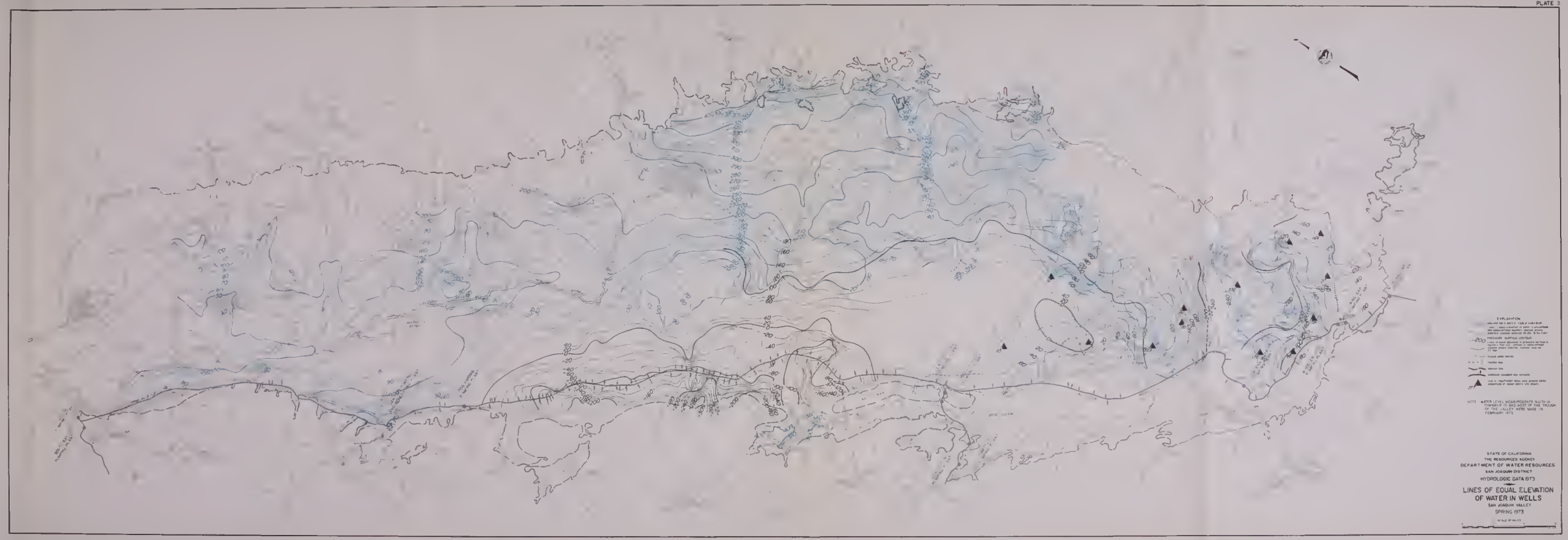
EXPLANATION
NOTE WATER LEVEL MEASUREMENTS SOUTH OF TOWNSHIP 9 S AND WEST OF THE TROUGH OF THE VALLEY WERE MADE IN FEBRUARY 1973
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