STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING

Bulletin No. 23-55

REPORT OF

SACRAMENTO-SAN JOAQUIN
WATER SUPERVISION

FOR

1955

GOODWIN J. KNIGHT
Governor

HARVEY O. BANKS
Director of Water Resources

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U. S. Bureau of Reclamation Photograph

FOLSOM DAM

Folsom Dam, forming Folsom Reservoir on the American River, was completed during 1956 under supervision of the Corps of Engineers, U. S. Army.

Crest Length

Concrete River Section	1,400 feet
Earth Fill Wing Dams (not shown)	8,850 feet
Height	340 feet
Reservoir Capacity	1,010,300 acre-feet
Elevation, crest of Taintor Gates as shown in photograph (USGS datum)	468 feet

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ALPHABETICAL INDEX TO TABLES (CONTINUED)

HARVEY O. BANKS
DIRECTOR

GOODWIN J. KNIGHT
GOVERNOR

ADDRESS REPLY TO
P. O. BOX 1079 SACRAMENTO 5
1120 N STREET GILBERT 3-4711

STATE OF CALIFORNIA

Department of Water Resources

SACRAMENTO

June 28, 1957

Honorable Goodwin J. Knight
and Members of the Legislature of the
State of California

Gentlemen:

I have the honor to transmit herewith the "Report of Sacramento-San Joaquin Water Supervision for 1955." This is the thirty-first report of a series prepared by the Department of Water Resources or its predecessors.

The report presents basic data consisting of daily mean flow in second-feet at gaging stations along the Sacramento and San Joaquin Rivers and their tributaries, the amounts of water diverted from those streams and the acreages irrigated, salinity concentration conditions in the Sacramento-San Joaquin Delta, and chemical analyses of surface waters in the Central Valley area.

A portion of the data presented herein was made available through the cooperation received from Federal and other public and private agencies. These agencies are named in the "Acknowledgment."

Very truly yours,

Harvey O. Banks

Harvey O. Banks
Director

ACKNOWLEDGMENT

Valuable assistance has been rendered by landowners, water users, and by public and private agencies through their executives, engineers, managers, and superintendents in the conduct of the field work and preparation of data for this report of Sacramento San Joaquin Water Supervision activities.

The Pacific Gas and Electric Company, the Sacramento Municipal Utility District, and the Modesto and Turlock Irrigation District have furnished a large number of electric power consumption records for computation of amounts of water pumped from streams.

The United States Department of Interior, Geological Survey, has extended valuable cooperation in gathering and reporting stream flow data under the Federal-State Cooperative Stream Gaging Program.

The United States Department of Interior, Bureau of Reclamation, has cooperated by providing funds under the Federal-State Cooperative Hydrographic Contract toward collection of data by the State and has furnished data on reservoir operation, stream flow, diversions, deliveries, and quality of water relating to the Central Valley Project. The Bureau of Reclamation has also provided funds necessary to maintain the regular program of salinity observations in the Sacramento-San Joaquin Delta during 1955.

The City of San Francisco Public Utilities Commission, Kings River Water Association, Central California Irrigation District, Corcoran Irrigation District, Kern County Land Company, Tulare Lake Basin Water Storage District, and the Corps of Engineers, Department of the Army, have made available stream flow data for certain San Joaquin Valley streams.

ORGANIZATION

DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING

Harvey O. Banks	Director of Water Resources
William L. Berry	Chief, Division of Resources Planning
Irvin M. Ingerson	Chief, Engineering and Data Services Branch

---

Activities covered by this report are under the direction of

Charles A. McCullough	Supervising Hydraulic Engineer

The Water Supervision Program is under the supervision of

Vernon Bengal	Supervising Hydraulic Engineer

Assisted by

Floyd I. Bluhm	Associate Hydraulic Engineer

Collection, correlation, and computation of hydrographic data are under the supervision of

Joseph L. Clausse	Associate Hydrographer in charge of stream flow group
Grant C. Ardell	Associate Hydrographer in charge of diversion group

Field and Office Personnel

Claire H. Epperson	Associate Hydrographer Supervisor of Colusa Field Office
A. B. Myers	Associate Hydrographer Supervisor of Modesto Field Office
Linwood L. Bates	Assistant Hydraulic Engineer
C. L. Chastain	Assistant Hydraulic Engineer
Robert W. Grimshaw	Assistant Hydraulic Engineer
Kenneth E. Lerch	Assistant Hydraulic Engineer
Walter D. McIntyre	Assistant Hydraulic Engineer
Kenneth E. Morgan	Assistant Hydraulic Engineer
Harry L. O'Neal	Assistant Hydraulic Engineer
Ernest G. Olsen	Assistant Hydraulic Engineer
Emil M. Padjen	Assistant Hydraulic Engineer
Paul E. Simpson	Assistant Hydraulic Engineer
Alfred E. Welsh	Assistant Hydraulic Engineer
Donald A. Williams	Assistant Hydraulic Engineer
John C. Etchells	Assistant Civil Engineer
Arthur L. Winslow, Jr.	Assistant Civil Engineer
Erle W. Danley, Jr.	Assistant Hydrographer
Laurence O. Grossnickle, Jr.	Assistant Hydrographer
William D. Harrison	Assistant Hydrographer
Robert A. Steel	Junior Civil Engineer
Newell E. Burtis	Junior Hydrographer
Keithal B. Dick	Junior Hydrographer
Norman E. Grussenmeyer	Junior Hydrographer
Doris M. Jacinto	Junior Hydrographer
John R. Deglow	Engineering Aid II
Julaine Patton	Engineering Aid II
Charles D. Skinkle	Engineering Aid II
Steve Makis, Jr.	Engineering Aid I
C. L. Emery	Delineator
Kay Shibata	Delineator

Paul M. Barnes	Chief, Division of Administration
Porter A. Towner	Chief Counsel
Isabel C. Nessler	Coordinator of Reports

ORGANIZATION

DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING
(continued)

Note: Prior to establishment of the Department of Water Resources on July 5, 1956, the following organizational positions were in effect under the Division of Water Resources:

Harvey O. Banks	State Engineer*
Walter G. Schulz	Assistant State Engineer*

Carl A. Werner	Supervising Hydraulic Engineer in charge of water supervision activities
E. Morris McClung	Assistant Hydraulic Engineer
John E. Meunier	Assistant Hydraulic Engineer
Al E. Lewis	Assistant Civil Engineer
T. I. Rausch	Junior Hydrographer
Jack C. Robertson	Junior Hydrographer
James R. McConnen	Senior Engineering Aid
James J. Delaney	Hydrographic Aid
Lentner E. Sherer	Under Engineering Aid

Henry Holsinger	Principal Attorney
T. R. Merryweather	Administrative Officer

---

* A. D. Edmonston was State Engineer until his retirement on November 1, 1955.

* Gerald H. Jones was Assistant State Engineer until his retirement on November 1, 1955.

SACRAMENTO-SAN JOAQUIN WATER SUPERVISION

Water Supervision activities, resulting from the efforts of the first Sacramento-San Joaquin River Problems Conference and its Permanent Committee working with the former Division of Water Rights, were inaugurated in 1924. A complete description of the origin, history, and conduct of the work is found in the 1924 and 1926 Biennial Reports and in Bulletin Number 4 of the former Division of Water Rights, and in Bulletin Number 23 of the succeeding Division of Water Resources. The latter bulletin brings together all data and measurements obtained in the first five-year period, 1924 to 1928, inclusive. Annual Water Supervision reports for subsequent years are in separately bound books similar to this report.

Through use and review of all previous reports by various people errors have been noted. A tabulation of corrections for all errors found has been prepared and is included at the end of this report.

Objectives

At the outset, the objective of the work of Water Supervision in the valley floor areas along the Sacramento and San Joaquin River system was to afford relief to water users from the difficulties of obtaining irrigation supplies occasioned by uncoordinated diversions during years of substantially subnormal runoff. The situation called for voluntary regulation of diversions in order to alleviate as far as possible the damage from the serious shortages in the water supplies needed for irrigation, municipal consumption, salinity control in the Sacramento-San Joaquin Delta, and navigation purposes. Equitable coordination of diversions was accomplished primarily through the Water Supervision program.

There is no agreement among the water users under which a watermaster might distribute the natural water supply equitably to those entitled to receive it, but it appears inevitable that such an agreement, embracing a definite schedule of relative water rights, will be developed. Its realization will require, however, reliable data, covering a long period of years, on the actual diversions and uses of water, stream flows, stream accretions, and salinity encroachment into the Sacramento-San Joaquin Delta. Looking toward that end, it has been the objective of the Division (now Department) of Water Resources through its Water Supervision work, to collect and record all of the basic hydrographic data essential to the formulation of an intelligent and practicable agreement.

Scope of Water Supervision Work

The work of the Sacramento-San Joaquin Water Supervision program is concerned mainly with the gathering of basic data relating to water supply and water utilization in the Sacramento and San-Joaquin Valleys. The work consists of field measurements and observations and office computations to determine and tabulate the daily or monthly quantities of stream flow, accretions, diversions, and use of water. The work also includes maintaining the Delta salinity observation program; cooperation with and assistance to water users and agencies and furnishing hydrographic data in connection with individual problems of water supply and water utilization; and assistance with hydrographic activities of cooperating public and private agencies.

The field activities include measurements of (1) flow in streams and drainage channels, (2) the amounts of water returned to natural channels, through drainage plants or gravity drains, and (3) the amounts of water diverted and collection of records of use by each water user. An annual census and mapping of irrigated acreages is also obtained.

The office work comprises mainly the assembly, computation, and analysis of Hydrographic and other data collected during the season for presentation in the annual report of Water Supervision. This report contains the basic records of water supply available to, and the water utilization by, each user of water from the streams covered in the area. The computation of stream flow, drainage, and accretions involves the conversion of the recorded daily gage records to figures showing the daily flows in second-feet and monthly runoffs in acre-feet. The computation of the amounts of water diverted by each water user involves the calibrating and rating of suitable measuring devices at each point of gravity diversion and the calibrating and rating of each diversion pumping plant. The final computations of the diversion quantities, as shown in this report, are the result of giving full consideration to all measurements and records of operation during the entire season for each individual diversion. The results of these computations are then compiled in the tabulations in this report for the purpose of giving basic records that are readily usable by all interested parties.

The area embraced by the Sacramento-San Joaquin Water Supervision work lies on the Sacramento and San Joaquin Valley floors. The area covered and its geographical relation to the Central Valley Drainage Basin are shown on Plate 1. It specifically covers all of the lands irrigated from the Sacramento River between Redding and Sacramento, including those irrigated from the Colusa Trough, Back Borrow Pit, Knights Landing Ridge Cut, and Yolo By-Pass above West Sacramento, from Lower Butte Creek and Butte Slough, from the Feather River below Oroville, from the Yuba River below Smartville, from the Bear River below Wheatland, from the Sutter By-Pass and Sacramento Slough, from the American River below Fair Oaks, from the Cosumnes River below Michigan Bar, from the Mokelumne River below Clements, from the Calaveras River below Jenny Lind, from the San Joaquin River between Friant Dam and Mossdale Bridge, from the Merced River below Snelling, from the Tuolumne River below La Grange, from Dry Creek (tributary to Tuolumne River) below Oakdale-Waterford road, from the Stanislaus River below Knights Ferry, from the Tule River below South Fork, and the irrigated areas lying on the "uplands" side of and receiving water from the San Joaquin River between Mossdale Bridge and Stockton, Old San Joaquin River, Tom Paine Slough, and from Cache Slough and other Delta sources.

The scope of work also includes the recording of the diversions and acreages irrigated by the large east-side irrigation districts (Modesto, Merced, Oakdale, South San Joaquin, and Turlock) and the diversions and deliveries by the canals of the Central Valley Project.

Records of daily flows at all the foothill gaging stations on streams entering the Sacramento and San Joaquin Valleys and at most of the valley floor gaging stations operated by State, Federal, or private agencies are collected and presented in these Water Supervision

annual reports. The specific degree of cooperation by these agencies with the Water Supervision function is detailed in footnotes on the tables contained in this report. Records of salinity in the Sacramento-San Joaquin Delta and records of analyses of water samples taken at many locations throughout the Central Valley are also presented in these reports.

In accordance with the provisions of Contract No. 55-CA-22 between the Division of Water Resources and the U. S. Bureau of Reclamation, the daily mean flows at 15 stream flow stations, and the diversions by reaches, from the main streams and tributaries in the Sacramento and San Joaquin Valleys were transmitted monthly to the Regional headquarters of the Bureau of Reclamation.

Trial Water Distribution Program

A "Memorandum of Understanding Relating to a General Approach to Negotiations for Settlement of Water Diversions from the Sacramento River and the Sacramento-San Joaquin Delta with the Objective of Avoiding Litigation" was entered into on July 7, 1952, by the Bureau of Reclamation, the Sacramento Valley Water Users Committee, and the State of California. The objective was an amicable settlement of nearly 40 years contention over rights of various diverters along the Sacramento River and Delta channels, and the added complications which were attributable to construction and operation of the Central Valley Project by the United States.

Studies made under the 1952 agreement indicated that upstream from the latitude of the City of Sacramento, a diversion schedule should be tentatively established and tested by trial distribution, and detailed observation and recordation. Accordingly an "Agreement for Trial Distribution of Water of the Sacramento River during 1954" was worked out between representatives of the Bureau of Reclamation, the State, and diverters of more than ninety per cent of the water diverted from the Sacramento River. Operation under the agreement began in March 1954, with the proviso that the water rights to use of Sacramento River water would not be affected, and that data collected would be for information purposes only.

In September 1954 the Sacramento River and Delta Water Association was formed as successor to the Sacramento Valley Water Users Committee to include water users in the Delta. This newly formed group was instrumental in the formulation of the "Sacramento River and Delta Trial Distribution Agreement for 1955" and in coordinating the activities of the Sacramento River and Delta water users in their relation to the trial water distribution program.

It is anticipated that information gained from testing trial diversion schedules will aid in developing a comprehensive diversion schedule which will be satisfactory to all interests without recourse to litigation.

During 1955 monthly reports of stream flow and diversions were made in accordance with the terms of the "Sacramento River and Delta Trial Water Distribution Agreement for 1955." A summary report for the season was also published in January 1956 under the terms of this agreement.

The activities under the 1955 trial distribution program concerning the collection of additional data on stream flow, diversions, accretions, and return flows performed by

the Water Supervision function were financed by funds furnished by the Water Project Authority under a service agreement with the Division of Water Resources.

Description of Summary Tables

A comprehensive summary and inventory of the stream flows, diversions, and accretions by months in acre-feet for the 1955 calendar year, are contained in Tables 4, 5, and 6. Table 7 presents a summary of the inflow to and diversions from the Sacramento-San Joaquin Delta. The daily flows in second-feet at the various gaging stations and the monthly diversions in acre-feet by individual points of diversion are presented in other tables in this report.

Tables 4, 5, and 6 present summaries by months of: (1) flows in acre-feet at each gaging station along the main streams, drain canals, and by-pass channels from which diversions are measured in the Sacramento and San Joaquin Valleys, (2) flows in acre-feet at gaging stations on tributaries or distributaries of the main stream channels, (3) total diversions in acre-feet in reaches between gaging stations on the main stream channels, and (4) unmeasured accretions in acre-feet as computed for each of the reaches. The unmeasured accretions between gaging stations were computed by subtracting the measured inflows to a reach from the sum of the measured diversions and measured outflows from that reach. An accretion with a negative sign indicates a net outflow or loss.

Table 7 presents summaries by months of: (1) flows in acre-feet at gaging stations on streams tributary to the Sacramento-San Joaquin Delta, (2) water supply derived from direct precipitation on the Delta area, (3) estimated consumptive use in the Delta area derived from unit consumptive use data applied to the land use survey made in 1955, (4) diversions in acre-feet exported from Delta channels to areas outside of the Delta Uplands, and (5) diversions in acre-feet to the Delta Uplands.

RUNOFF AND WATER SUPPLY

The streams entering the Central Valley on the north and east produce the principal runoff to the valley. The runoff is derived from rainfall occurring each winter and spring season principally from December to April, from snowmelt occurring during the spring and summer seasons from March through June, and a combination of runoff from perennial tributaries and released stored water during the summer and fall seasons.

During the summer irrigation season, variations in flow of the streams on the valley floor are caused (1) by the combination of diversions from the streams for irrigation and of accretions to the streams from both direct surface drainage and seepage from ground water, and (2) by releases of stored water for irrigation, navigation, salinity control, and the generation of electric power.

Flood flows in the valley floor channels are caused by runoff from rainfall and melting snow in the mountain areas in excess of mountain reservoir capacities, and by rain storm runoff from the vast area of minor foothill watersheds and valley floor lands. Some

incidental flood control is accomplished by reservoirs in many of the tributary watersheds including those of the Sacramento, Feather, Yuba, Stanislaus, Tuolumne, Merced, and San Joaquin Rivers. The extent of the flood flows in 1955 is given by the tabulations of daily stream flows, Tables 10 through 175.

Floods of 1955

During the week preceding Christmas 1955, northern and central California was subjected to one of the greatest floods in the State's history of recorded stream flow. On many streams the peak discharges are believed to have been greater than the legendary floods of 1861-62. The magnitude of the flood crests as determined by the U. S. Geological Survey are given in the following tabulation.

Stream and Station	Date and Crest in Second-Feet of Previous Flood		Date and Crest in Second-Feet of 1955 Flood	
Feather River near Oroville	3-19-07	230,000	12-23-55	203,000
Yuba River near Smartville	3-26-28	120,000*	12-23-55	160,000*
Cosumnes River at Michigan Bar	11-18-50	27,600	12-23-55	42,000
Mokelumne River at Woodbridge	11-22-50	27,000	12-24-55	23,000
Stanislaus River below Melones	11-21-50	49,500	12-23-55	62,800
Kaweah River near Three Rivers	11-19-50	52,000	12-23-55	80,700
Tule River near Porterville	11-19-50	25,500	12-23-55	24,200

* Flow estimated from sum of flows of Yuba River at Englebright Dam and Deer Creek near Smartville.

The flooding resulting from levee breaks caused the loss of at least 67 lives and damage to public and private property approaching $200,000,000. However, the completion within the last five years of large scale flood control works did much to minimize or prevent damage in many areas. Folsom Dam on the American River, Pine Flat Dam on the Kings River, and Isabella Dam on the Kern River controlled the 1955 floods to manageable releases. A report, "Flood Flows and Stages 1954-1956" dated 1957 gives a detailed description of the storms and of the flood conditions which resulted.

Many current meter flow measurements were made by Water Supervision personnel and by cooperating agencies to determine crest flow values. Where flooding prevented access to some gaging stations, it was necessary to determine crest flows by slope-area measurements and by log-log plottings of flow-stage relations. A more detailed picture of the flood flows of December 1955 may be seen in tabulations of daily stream flows, Tables 10 through 175.

Precipitation

In the Central Valley of California, direct precipitation is a negligible source of water supply for growing crops during the late spring, summer, and fall seasons. During March and April, however, rain storms substantially reduce the demand for irrigation diversions, and are one of the main factors affecting the variations in demand in the same month from year to year.

Table 1 presents records of the monthly precipitation in inches at representative valley floor rainfall stations. The corresponding computed normal precipitations for each

month based on the 50-year period 1905-1955 are also shown. The monthly precipitation figures were obtained from U. S. Weather Bureau records.

Runoff Comparisons

In order to compare runoff conditions occurring from year to year for a particular stream, it is first necessary to compute the mean runoff for that stream over a long period of years. This mean runoff is then assumed to be the normal with which the runoff for any one year or season may be compared. Since conditions of natural or unimpaired runoff are affected by man-made impairments to the flow such as diversions and storage, runoff comparisons are made from a computed natural runoff. Natural runoff at foothill gaging stations is computed from measured (actual) runoff by allowing for diversions, importations, or storage development above the point where the flow is measured. The runoff or water year is considered to be the period October 1 through September 30. Runoff comparisons in this report are based on percentages of normal determined for the 50-year period October 1905 through September 1955.

The runoff for each month of the 1954-55 water year in each of the major streams tributary to the Sacramento and San Joaquin Valleys in per cent of normal for the 50-year period is presented in Table 3, "Monthly Runoff in Per Cent of Normals."

A comparison of the unimpaired October through September flows for the period 1920-1955, in the major streams tributary to the Sacramento and San Joaquin Valleys in per cent of the 50-year normal is presented in Table 2 entitled "Seasonal Runoff in Per Cent of Normals." Following is a summary of the 1954-55 unimpaired runoff as shown in Table 2.

Stream and Station	Percentage of 50-year Normal
Sacramento River at Red Bluff	70
Sacramento River at Sacramento	63
San Joaquin River below Friant	66
San Joaquin River near Vernalis	61
Sacramento and San Joaquin Rivers flow to the Delta	62

Comparisons with other years indicate that the water supply available during the 1955 season was about two-thirds of normal in the Sacramento and San Joaquin Valleys. Observations of water utilization and the amounts of residual flows in the streams reaching the Delta in the 1955 growing season indicated that the demands for irrigation and salinity control in the Delta would have exceeded the residual from the natural flow supplies. The releases of stored water from Shasta Lake and Folsom Reservoir were of primary importance in maintaining satisfactory flows and water quality conditions in the major portion of the Delta.

Central Valley Project Reservoir Operations

The operations of the following three reservoirs, Shasta, Folsom, and Millerton are under jurisdiction of the United States Bureau of Reclamation.

Shasta Lake on the Sacramento River above Redding was first used to store water for irrigation use during the winter of 1943-44 and releases for supplemental irrigation water along the Sacramento River commenced in the late spring of 1944. The release of water from the Lake since 1944 has substantially altered the regimen of flow of the Sacramento River

and in many respects greatly benefited conditions along that stream. However, it has also created added diversion and drainage problems.

Folsom Reservoir on the American River was constructed under contracts supervised by the Corps of Engineers, U. S. Army. Work was begun on October 30, 1948, and completed during 1956. Upon completion the dam and reservoir were transferred to the Bureau of Reclamation for operation and maintenance and integration into the operation of the Central Valley Project under provisions of Public Law 356, enacted by Congress on October 14, 1949.

Although not completed, Folsom Reservoir was used for storage of water beginning in the spring of 1955. During the flood of December-January, 1955-56, the dam was capable of impounding nearly its full capacity and thus prevented possible flooding of a large part of the metropolitan area of Sacramento, and the Sacramento-San Joaquin Delta. Folsom Dam also was operated during 1955 to regulate releases for power generation and other uses in the Central Valley Project.

Millerton Lake (Friant Reservoir) on the San Joaquin River near Friant was first used to store water for irrigation use during the winter and spring of 1943-44 and the first releases for supplemental irrigation water occurred during 1944. Friant Dam was operated during 1955 to divert water into Friant-Kern and Madera Canals, and to regulate releases in coordination with deliveries through Delta-Mendota Canal.

Reservoir Data. Shasta Lake was created by a gravity concrete dam on the Sacramento River 528 feet high above stream bed, located 13 miles upstream from Redding. The gross capacity of the reservoir is 4,500,000 acre-feet, of which a space of 4,000,000 acre-feet is available for the active storage of water and 500,000 acre-feet of space is used to create head for the generation of power. The maximum flood control reservation is 1,300,000 acre-feet during flood season. There is sufficient water to fill the entire storage capacity in all years of normal or greater than normal runoff above the dam. Water from the lake is conveyed through the Sacramento Valley in the channel of the Sacramento River. Shasta releases are reregulated by Keswick afterbay which has a storage capacity of 24,000 acre-feet.

Folsom Reservoir, on the American River, was formed by a gravity concrete dam, 340 feet high above stream bed, and located about 20 airline miles northeast of Sacramento. The gross reservoir capacity is 1,010,300 acre-feet with a maximum allocation of 400,000 acre-feet for flood control. Folsom releases are reregulated by Nimbus afterbay which will also act as a diversion dam for water flowing in the Folsom north and south canals. The Nimbus afterbay is called Lake Natoma.

Millerton Lake, on the San Joaquin River, was created by a gravity concrete dam about 296 feet high above stream bed and is located at the base of the foothills about 20 miles northeast of Fresno. The gross capacity of the reservoir is 520,000 acre-feet, of which about 434,000 acre-feet is usable storage above the Madera Canal outlets, the lower of the two canals diverting from the reservoir. The major portion of the water from Millerton Lake is conveyed through the Madera and Friant-Kern Canals to lands north and south of the San Joaquin River in Madera, Fresno, Kings, Tulare, and Kern Counties.

Shasta Lake Operation - 1955. Shasta Lake was designed to: (1) furnish water for irrigation in the Sacramento and San Joaquin Valleys, including the Sacramento-San Joaquin Delta area, (2) provide salinity control in the Delta by maintaining a flow in the lower Sacramento River sufficient to repel the intrusion of salt water from Suisun Bay, (3) control floods on Sacramento River, (4) provide sufficient depths for navigation on the Sacramento River between Sacramento and Chico Landing, and (5) generate hydroelectric power.

Since 1944, including 1955, the quantity of water in storage in Shasta Lake has been sufficient to afford releases (1) to facilitate irrigation diversions by maintaining higher river levels along the Sacramento River, (2) to sustain minimum flow for navigation of approximately 5,000 second-feet upstream from Knights Landing, (3) to supplement irrigation supplies in the Delta area below Sacramento, (4) to control salinity, and (5) to supply water for exportation via the Delta-Mendota and Contra Costa Canals. The Delta Cross Channel near Walnut Grove was operated during 1955 allowing approximately 3,000 second-feet of Sacramento River water to be transferred into the San Joaquin portion of the Delta. The transfer of Sacramento River water through the Cross Channel and other existing channels was sufficient to allow approximately 3,200 second-feet of water for exportation by the Delta-Mendota and Contra Costa Canals during the peak of the season, and aided in maintaining the stream flow out of the Delta into Suisun Bay sufficient to hold the line of saline concentration of 1000 ppm of chlorides to the lower end of the Delta.

The daily mean second-foot flows into Shasta Lake during 1955 are presented in Table 14. These inflows to the reservoir are representative of the amounts of water that would have been flowing in the Sacramento River at the dam site if the dam had not been built. The inflow figures have been computed by combining the effects of daily change in storage, reservoir evaporation, releases, and spill. The inflows as measured at gaging stations on the major tributaries to the reservoir are presented in Tables 10, 11, 12, and 13.

A tabulation of the daily amounts of water in storage in Shasta Lake during 1955 is presented in Table 15. The daily mean second-foot flows as measured below Shasta Dam at the United States Geological Survey Gaging Station at Keswick are presented in Table 16. The flows at the Keswick station are the same as the releases from Shasta Lake except for daily regulation by Keswick Reservoir and the amounts of inflow between the station and Shasta Dam. The amounts of this inflow are small during the irrigation season, so that the average daily flows at the gaging station are nearly the same as the releases from the reservoir during that period.

A chart depicting the operation of Shasta Lake for 1955, as prepared by the U. S. Bureau of Reclamation, giving the inflows to the lake, the amounts released, the water surface elevations, and the amounts of water in storage, is shown on Plate 2.

Folsom Reservoir Operation - 1955. Folsom Reservoir was designed to store water for irrigation and flood control, and to generate hydroelectric power. The computed daily mean second-foot inflows to Folsom Reservoir during 1955 are presented in Table 94. The inflow figures have been computed by combining the effects of daily change in storage,

releases, spill, pumping, and evaporation. These inflows are representative of the amounts of water that would have been flowing in the American River at the dam site if the dam had not been built.

The daily amounts of water in storage in Folsom Reservoir during 1955 are listed in Table 95. The daily mean second-foot flows as measured below Folsom Dam at the United States Geological Survey gaging station at Fair Oaks are the same as the releases from Folsom Reservoir except for daily regulation by Nimbus Dam and the amounts of inflow between the station and Folsom Dam. The amounts of this inflow are small during the irrigation season, so that the average daily flows at the gaging station are nearly the same as the releases from the reservoir during that period.

A chart depicting the operation of Folsom Reservoir for 1955, as prepared by the U. S. Bureau of Reclamation, giving the same data as are shown by the chart for Shasta Lake, is also shown on Plate 2.

Millerton Lake Operation - 1955. Millerton Lake is used for storage of water for flood control and irrigation purposes. The computed daily mean second-foot inflows to Millerton Lake during 1955 are presented in Table 123. A daily tabulation of the amounts of water in storage in the lake during 1955 is presented in Table 124. The daily mean second-foot flows, as measured at the United States Geological Survey gaging station below Friant, are presented in Table 125. These flows are the same as the releases from Millerton Lake except for the amounts of inflow and pump diversions between the station and Friant Dam. A chart depicting the operation of Millerton Lake for 1955, as prepared by the U. S. Bureau of Reclamation, giving the same data as are shown by the chart for Shasta Lake, is also shown on Plate 2.

During the 1955 irrigation season, water stored in Millerton Lake was released into the Madera Canal, the Friant-Kern Canal, and into the channel of the San Joaquin River. The quantities of diversions into the Madera and Friant-Kern Canals are shown in Table 203. The regulated releases flowing down the San Joaquin River served not only the irrigation requirements of the lands along that stream above the head of the Gravelly Ford Canal, but also the requirements of the numerous diversions below that point to Temple Slough in coordination with the deliveries of water through the Delta-Mendota Canal.

Primary Irrigation Supplies

The flows onto the valley floor during the summer season through the major streams are considered to be the primary water supplies for irrigation. This primary water does not include supplies available for irrigation in the lower reaches of the streams resulting accretions, irrigation return, and drainage. The amounts of primary water available for irrigation in the Sacramento Valley are given in the flow tabulations for those gaging stations located at the edge of the valley floor.

In the San Joaquin River service area, primary water supplies are almost entirely diverted from the upper reaches of the Stanislaus, Tuolumne, and Merced Rivers by the large irrigation districts, and from the San Joaquin River at Friant Dam by the Friant-Kern and

Madera Canals. These upper diversions from the Stanislaus, Tuolumne, Merced, and San Joaquin Rivers are included in Table 203. Primary regulated water supplies in the San Joaquin River for irrigation below Friant are measured at the San Joaquin River gaging station below Friant, Table 125. These latter regulated water supplies are almost entirely diverted in the vicinity of Mendota.

Inflow to Sacramento-San Joaquin Delta

The inflow to the Sacramento-San Joaquin Delta is measured at gaging stations on major tributary streams around its perimeter. The monthly flows in acre-feet at each of the inflow stations and the total measured inflow to the Delta are summarized in Table 7.

Accretions to Stream Flow

The amount of total accretion along any stream reach is the summation of the amounts of measured inflows plus the amounts of unmeasured accretions, as shown in Tables 4, 5, and 6. These accretions are made up of measured flows from surface streams and drains, and of other flows, not susceptible to direct measurement such as those from minor ephemeral streams, from seepage return of percolated irrigation water, and from escaping underground water normally present as the result of percolated rainfall on the valley floor. Because of the large quantities these accretions are of major importance as available irrigation supplies.

During the summer season, a large portion of the accrete water is derived from upstream irrigation returning to the streams either by surface drainage or by percolation. Throughout the year, along certain reaches of the stream, the flows are augmented by outflows from seepage of the natural ground water. This portion of the ground water, which is independent of irrigation as a source, is replenished from two other sources: (1) rainfall on the valley floor, a portion of which percolates to the water table during periods of abundant precipitation, and (2) return of bank storage during low flow conditions following periods of flood-flow conditions.

Sacramento Valley Accretions. In the Sacramento Valley all of the accretions to natural and regulated flows, which are not diverted on lands north and west of the Sacramento Delta, flow into the Delta and are available for use in that area. Practically all of the summer accrete flows in Colusa Trough, Back Borrow Pit, Knights Landing Ridge Cut, and Yolo By-Pass are return waters derived from diversions from the Sacramento River. Since the Sacramento River is the main stream through the Sacramento Valley, the accretions to that stream include substantial amounts of return water from irrigated areas served by water from other sources, particularly the Feather River. A large part of the summer return water flows reaching the Sacramento River through the Butte Slough Outfall Gates (Mile 84.0L) and from Sutter By-Pass through Sacramento Slough (Mile 21.2L) are of Feather River origin.

Along the Feather River during years of subnormal water supply, practically all of the primary regulated water is diverted upstream from, or at, the Sutter-Butte Canal Company diversion dam, yet accretions accumulate below that point in amounts sufficient to afford a limited supply for other diversions.

Table 4 is designed to give a summary not only of monthly flows measured on the Sacramento Valley floor, but also the computed monthly amounts of accretions (or losses, as

shown by a minus sign preceding the figure) occurring along each reach of each stream between gaging stations. At the end of each series of data for one stream as shown in Table 4, there are summations of diversion and accretion quantities.

In order to compare 1955 season conditions along the Sacramento River with those of previous years, the following tabulation gives the seasonal accretions, July through September, in per cent of simultaneous diversions. The accretion used in computing the per cent of diversion figure was obtained by taking the total unmeasured accretion, Red Bluff to Sacramento, from Table 4 and adding to this total the measured flows of the drainage pumping plants of Reclamation Districts 70, 108, 787, 1000, 1500, and the return flows of Colusa Basin Drain including Knights Landing Ridge Cut and Sycamore Slough.

Comparative seasonal Accretion Percentages - 1946-1955

Sacramento River - Red Bluff to Sacramento

Year	Accretions in per cent of Diversions* July through September
1946	51
1947	52
1948	62
1949	58
1950	63
1951	57
1952	52
1953	49
1954	48
1955	56

* Excludes City of Sacramento municipal diversion.

Examination of the accretion percentages indicates that the accretions vary within a range of 15 per cent of diversions. No definite correlation has been found between these accretion percentages and the per cent of normal of seasonal runoff. Similar percentage figures for years prior to 1946 are presented in the 1953 Water Supervision Report.

San Joaquin Valley Accretions. The summer and fall season stream flows in the lower San Joaquin River and its tributaries on the valley floor consist mainly of accrete flows derived, to a large extent, from irrigation water returning to the stream channels by way of percolation to the ground water and ground water seepage to the channels. The exceptions to this condition are on the Tuolumne and Stanilaus Rivers where irregular releases for power generation below upstream diversion points further augment the flows.

The channels of the Stanislaus, Tuolumne, and Merced Rivers in their westward flow from the foothills are confined by bluffs rising from 10 to 50 feet to the predominant level of the valley. The plains areas are intensively irrigated with regulated gravity water supplies derived from the upper reaches of the same streams. Thus, an abundant water supply in normal years, a deep and permeable soil, and the entrenched river channels are all conducive to relatively steep slopes of the ground water table toward the rivers and the consequent high rate per mile of accretions to the stream flow.

The channel of the San Joaquin River between Friant and the valley trough near Mendota is confined between relatively steep bluffs rising 10 feet to 100 feet. The plains

area along the south side of this reach is intensively irrigated with Kings River water through the Fresno Irrigation District distribution system. On the plains along the north side of this reach in Madera County, irrigation water is derived mainly from ground water, except for occasional parcels served with pumped river water or by gravity supplies from Fresno River. In general the elevation of the ground water plane on the south side of the San Joaquin River is above the river bed and along the north side it is below the bed. Consequently, there are accretions from the south and losses to the north along the central portion of this reach of the San Joaquin River. The magnitude and importance of these accrete waters in the San Joaquin Valley as a water supply is brought out in Table 5.

The Tule River debouches onto the valley floor in the vicinity of Porterville through a shallow meandering channel. The channel crosses an alluvial fan made up of unconsolidated sediments with high permeability which accounts for the heavy channel losses along Tule River as shown in Table 6.

Surface Accretions to Delta Lowlands Channels. The quantities of accretions to Delta Lowlands channels have been computed from periodic measurements and gage height observations of the gravity drains, and from pump tests and power records of the drain plants. At some of the larger gravity drains water stage recorders have been installed and the flow computed as for a stream gaging station. Table 7 shows a summary of the amounts of accretion to the Delta area. These accretions are considered as part of the water supply to that area. The records of total accretions are not complete for the season because some of the records for the Trial Water Distribution program were not initiated until May or June of 1955.

Stream Flow Records

The records of 159 gaging stations for the 1955 season are included in this report. Of this total, 66 stations were maintained, operated, and rated, and the flows computed by the Division of Water Resources. Records for the remaining stations were furnished by cooperating agencies. The location of each station is shown on Plate 3 in the pocket on the back cover of this report. A brief description of each station is given in the footnotes at the bottom of the stream flow data table.

Water surface elevations at any time at certain gaging stations may be estimated by using Table 9 coupled with the appropriate stream flows in second-feet as shown in the stream flow tables. From the stream flow table, the flow on any desired day is interpolated into the specific station's rating table in Table 9 to give an average gage height (or elevation) of the stream's water surface for that day.

Preliminary Data from Cooperating Agencies

Some of the stream flow records submitted by cooperating agencies and included in this report must be considered "Preliminary Data" since this report is published prior to final preparation of the data for publication by those agencies. This condition is particularly true with respect to some data furnished by the U. S. Geological Survey.

Delta Tidal Cycle Measurements

During the 1955 irrigation season a series of tidal cycle current meter measurements were made by the Division of Water Resources for the purpose of determining the net resultant

of the tidal flows in both direction and magnitude in certain channels of the Delta. Each of the measurements was made over a period of approximately 30 hours in order to encompass a complete cycle of four tides.

The measurements were made at the following nine sites, locations of which are shown on Plate 3.

1. Delta Cross Channel near Head
2. Georgiana Slough at Walnut Grove
3. San Joaquin River at Brandt Bridge
4. Middle River below head of Salmon Slough
5. Salmon Slough near Head
6. Dutch Slough at Burroughs Ranch
7. Old River at Clifton Court Ferry
8. Old River below Victoria Canal
9. Three Mile Slough near San Joaquin River

Measurements of the tidal affected flows in the Delta channels were made by the conventional boat and tagline method. Flow measurements were made at approximately hourly intervals over the duration of the tidal cycle.

The results of the measurements are tabulated in the following table. The dates and times shown indicate the duration of each of the measurements and the period for which the mean flow was computed. These flows were obtained by plotting a hydrograph from each of the hourly measurements made over the four phases of the cycle and planimetering the area under the hydrograph to obtain the mean ordinate. The beginning and end of a complete tidal cycle was determined by plotting the periodic observations of the local staff gage on the same graph. At some of the stations, it was possible to conveniently cover five tidal phases. In these cases, the mean flow for two complete cycles could be computed in the manner described by dropping off the first phase and adding the last. The mean flows shown in the table are the average flows for two complete cycles for those stations at which measurements were made over five tidal phases. Mean daily amounts of inflow and diversions in the Delta have been included in the table to assist in evaluating flow conditions which existed at the times of the various measurements.

Diversions by the Tracy Pumping Plant began in 1951, and by 1953 diversions had increased to as high as 3000 second-feet. During 1954 and 1955 maximum diversions were well over 3300 second-feet. This increased draft at the southern end of the Delta and the transfer of Sacramento River water across the Delta to the Tracy pumps resulted in a change in the normal pattern of flows in Delta channels which existed prior to 1951. The direction of net flow for the period of each measurement is indicated on Plate 3. The magnitude of the net flow is indicated in the following table without sign because varying conditions of inflow and diversions may change the direction of net flow in several of the Delta channels.

SACRAMENTO-SAN JOAQUIN DELTA
TIDAL CYCLE MEASUREMENTS - 1955

Flow quantities in cubic feet per second

Station (Location)	Mean Cyclic Flow	Period Date 1955	Time	Diversions *	Inflow Sacramento River at Sacramento	Inflow San Joaquin River nr. Vernalis
Delta Cross Channel at Head	3236	6/14	12:15P	3928	11800	1810
		6/15	2:00P	3914	11500	1490
Georgianna Slough at Walnut Grove	2083	6/14	12:00N	3928	11800	1810
		6/15	1:30P	3914	11500	1490
San Joaquin River at Brandt Bridge	97	7/26	8:50A	3911	8870	374
		7/27	3:20P	3914	8530	374
Middle River below Head of Salmon Slough	28.9	8/9	1:15P	3777	9390	411
		8/10	2:22P	3774	9410	389
Salmon Slough near Head	242	8/9	1:15P	3777	9390	411
		8/10	2:22P	3774	9410	389
Dutch Slough at Burroughs Ranch	9.8	8/18	12:30P	3495	9100	423
		8/19	1:00P	3495	8790	443
Old River at Clifton Court Ferry	2523	8/25	9:00A	3173	8140	389
		8/26	4:25P	3136	7870	404
Old River below Victoria Canal	1708	8/25	8:50A	3173	8140	389
		8/26	4:20P	3136	7870	404
Threemile Slough near San Joaquin River	171	8/25	6:20A	3173	8140	389
		8/26	1:40P	3136	7870	404
Victoria Canal	8158					

* Diversions from Old River and Tom Paine Slough including Delta-Mendota and Contra Costa Canals.
8 Computed as the difference between Old River at Clifton Court Ferry and Old River below Victoria Canal. Direction of flow is toward Old River.

Notes on Certain Gaging Stations

Records obtained and published in this report include 14 stations not heretofore published in this series of reports. A list of discontinued stations and newly included stations together with a repetition of notes on the Sacramento River at Sacramento, are as follows:

Discontinued Stations. The flow records of two stream flow stations were discontinued during 1955. These stations were:

Buena Vista Slough near Lost Hills, discontinued April 14, 1955

Goose Lake Slough near Lost Hills, discontinued April 14, 1955

The records for nine stream flow stations were discontinued in 1954 and are not included in this report. These stations were:

Barker Slough near Dozier
Haas Slough near Maine Prairie
James By-Pass (Fresno Slough) near San Joaquin
Pleasants Creek near Winters
Salt Creek near Winters
South Fork Tule River near Success
Sweeney Creek near Winters
Ulatis Creek near Binghampton
Ulatis Creek near Vacaville

Additional Stations Reported in 1955. The following 14 stations, for which data have not been previously published in the reports of Sacramento-San Joaquin Water Supervision, are included in this 1955 report.

Sacramento River above Reclamation District 108 Drain Plant

Reclamation District 1000 (Pritchard Lake) Drain

North Fork American River at North Fork Dam

Middle Fork American River near Auburn

South Fork American River near Lotus

Weber Creek near Salmon Falls

Folsom Lake Inflow

Daily content Folsom Reservoir

Bear Creek near Rumsey

Owens Creek below Owens Dam

Bear Creek below Bear Dam

Burns Creek below Burns Dam

Mariposa Creek below Mariposa Dam

Duck Creek Diversion near Farmington

Twelve of the stations represent stream flow gaging station installations, one represents computed amounts for reservoir inflow, and one shows record of reservoir content. Three of the stream flow stations are maintained and operated by the Department of Water Resources. A brief description of the location, the cooperative agency involved, the drainage area where applicable, and the period of record may be found in the footnotes under the respective table of flow for each of the stations listed.

Sacramento River at Sacramento. Flows at this station below 33,000 second-feet (gage height of 10.5) are affected by tidal action. The method of computing daily mean flows in this tidal-affected range, beginning with 1947, has been radically changed. As shown in reports prior to 1947, the flows were derived from (1) the records of flows at Verona on the Sacramento River and at H Street Bridge on the American River and (2) records of diversions from and drainage to the rivers between those two upper stations and the I Street Bridge at Sacramento. The method previously used did not take into account unmeasured accretions or losses which may have occurred in the reach between Verona and I Street Bridge and in the American River below H Street Bridge.

Since 1947 and including 1955, rating of the I Street Bridge gaging station and the computations of daily mean Sacramento River flows passing Sacramento have been made by the slope-velocity method. This method requires a consideration of the gage heights recorded at the river gaging station at Snodgrass Slough (20 miles downstream from Sacramento) as well as the recorded gage heights at Sacramento. Tidal fluctuations cease above the 10.5-foot stage and the regular stage-discharge rating is used for these higher flows. The technique involved in rating the flows by the slope-velocity method is described in previous Water Supervision reports.

Tide Gages

There were 34 continuous recording tide gage stations located on the Delta channels in operation during 1955. The Division of Water Resources operated and maintained 25 of these tide gages. The remaining 9 were operated by Federal agencies. A list including location of these stations is given in Table 176 and the locations are shown on Plate 3.

USE OF WATER FOR IRRIGATION

The prevailing warm termperatures and a prolonged frost-fee period during the summer season in the Sacramento and San Joaquin Valleys favors the profitable production of

a wide variety of marketable crops in large quantities. The availability of irrigation water during the dry summer season affords continuous growing conditions necessary for the many crops.

The major irrigated crops in the Sacramento Valley include rice, alfalfa, orchard fruits, nuts, grapes, hops, truck crops, field crops, and pasture grasses; in the Delta area they include alfalfa, asparagus, sugar beets, orchard fruits, corn, and truck crops; and in the San Joaquin River and tributaries service area they include grapes, nuts, orchard fruits, cotton, alfalfa, truck crops, corn, grain, flax, and pasture grasses.

Irrigation Diversions

Measurements and records of diversions in 1955 have included the points of diversion on the valley floor numbering 1455 along the following streams:

Stream	No. of Diverters
Sacramento River	350
Colusa Trough (above Colusa-Williams Highway Crossing)	38
Back Borrow Pit (extension of Colusa Trough below Colusa-Williams Highway along back levees of R.D. 108 & 787)	42
Knights Landing Ridge Cut	11
Yolo By-Pass	8
Lower Butte Creek and Butte Slough	41
Sutter By-Pass and Sacramento Slough	75
Feather River	52
Yuba River	13
Bear River	3
American River	18
Cosumnes River	35
Mokelumne River	81
Calaveras River (including Mormon Slough)	164
Delta Uplands	183
San Joaquin River (between Vernalis gaging station and Friant Dam)	134
Fresno Slough and James By-Pass	8
Merced River	81
Tuolumne River	45
Dry Creek (Tributary to Tuolumne River)	12
Stanislaus River	36
Tule River	10
Exportations from Delta by Central Valley Project and City of Vallejo	3
Canal Diversions by Central Valley Project and Irrigation Districts along east side of valley	12
Total	1455

The approximate locations of these points of diversion are shown on Plate 3 in the pocket at the back of this report.

The monthly amounts of water diverted at the individual points of diversion along all of the streams covered by the Water Supervision work are presented in Tables 178 through 203. The monthly amounts of diversions in acre-feet by the large east-side irrigation districts from the Stanislaus, Tuolumne, and Merced rivers during 1955 are presented in Table 203. The monthly diversions in acre-feet into the Friant-Kern and Madera Canals from Millerton Lake on the upper San Joaquin River are also presented in Table 203. The monthly diversions exported from the Sacramento-San Joaquin Delta via the Delta-Mendota and Contra Costa Canals of the Central Valley Project and by the City of Vallejo are presented in Table 202. The daily diversions to the Delta-Mendota and Contra Costa Canals are set forth in Tables 174 and 175. The monthly deliveries in acre-feet from the main canals of the Central Valley Project to the various water users along those canals are presented in Table 204.

Fresno Slough and James By-Pass (also known as Fresno Slough By-Pass) normally convey excess Kings River flood flows into the San Joaquin River at a point above Mendota Dam, but during the irrigation season, San Joaquin River water is backed up through those channels by the Mendota Dam to afford irrigation supplies to the James and Tranquillity Irrigation Districts and to certain other diverters. The diversion and irrigated acreage data for these streams shown in Table 196 were furnished by the U. S. Bureau of Reclamation.

A seasonal summary of water utilization during the past ten years, 1946 through 1955, from the Sacramento River and its tributaries and the San Joaquin River and its tributaries is shown in Table 176. This table presents an overall picture of the water utilization in these areas.

In Table 205 there are shown the average monthly diversions in per cent of the seasonal for the streams in the Sacramento and San Joaquin Valleys. A summary of the monthly diversions from the Sacramento and San Joaquin Valley streams for the ten-year period, 1946 through 1955, is presented in Tables 206 through 216. Table 217 shows, for the Sacramento River only, the seasonal diversions and acreages irrigated for the period 1946 through 1955, segregated to the different river sections.

Irrigated Acreage

Toward the end of the irrigation season in 1955, as was done in previous years, a complete canvass was made of acreages irrigated from each of the points of diversion covered by the Water Supervision work. The irrigated acreages for all of the points of diversion on the streams on the Sacramento and San Joaquin Valley floors were plotted on suitable maps and are retained on file in the office of the Department of Water Resources for record. The area irrigated segregated to rice and general crops through each individual point of diversion along the streams covered in this work is presented in Tables 178 to 201 inclusive.

The following is a summary of the total acreage irrigated during 1955 in the area covered by the Water Supervision work exclusive of the acreage served by the Friant-Kern, Madera, and Delta Mendota Canals. Detailed acreage tabulations of the totals shown below may be found in Tables 178 through 201 and in Table 219.

Area	Irrigated Acreage-1955	
Sacramento Valley Floor above Sacramento	459,893	
San Joaquin Valley Floor above Delta (including large east side I.D.)	823,141	
Delta Uplands and Tributaries	187,748	
Total area served by measured diversions		1,470,782
Sacramento-San Joaquin Delta Lowlands Area, 1955 Survey		385,743
Grand Total		1,856,525

In view of the methods of farming, which usually employ rotation of crops with summer-fallow it is probable that the acreage of land under irrigation facilities in the area covered by the Water Supervision activities excluding the areas served by the Central Valley Project Canals exceeds 2,000,000 acres.

Table 218 shows a comparison of the acreage of rice irrigated during the period 1924 through 1955 from the stream channels within the Sacramento and San Joaquin Valleys which are covered by Water Supervision work, and the total acreage of rice in California irrigated from all sources as reported by the Federal-State Crop Reporting Service.

Sacramento-San Joaquin Delta

The Sacramento-San Joaquin Delta service area is considered in two parts: (1) the "Delta Lowlands" commonly called the "Delta" consists generally of lands less than five feet elevation above mean sea level. These lands for the most part consume water derived from Delta channels by subirrigation or surface application not susceptible of direct measurement. The water surface of the Lowlands has been assumed to include all water in channels affected by tidal action in both the Lowlands and Uplands and up to the lowest gaging stations on streams tributary to the Delta. The Delta Lowlands boundary is shown on Plate 4 and encompasses approximately 467,000 acres. (2) The "Delta Uplands" lie outside of and adjacent to the "Delta Lowlands" and are served by irrigation water pumped from Delta channels. Lands served by diversions below the lowest gaging stations on streams flowing to the Delta which lie outside of the Delta Lowlands boundary are also considered as Delta Uplands. The Delta Uplands area is shown on Plate 4 and comprises approximately 205,000 acres.

The location of the boundary line for the Delta service area as shown on Plate 1 was determined so as to include in the service area lands that were (1) historically referred to as the Delta area as shown in Bulletin 27 and in Sacramento-San Joaquin Water Supervision reports of the Division of Water Resources, with the exception of Reclamation District 535, just south of Sacramento, (2) within "places of use" of rights to use water from Delta tidal channels designated in appropriative water rights permits and licenses as delineated in 1952, (3) within organized districts or individual ownerships containing land with elevation less than five feet above mean sea level, and (4) served historically with water originating from Delta tidal channels.

The water supply for the Sacramento-San Joaquin Delta is measured at gaging stations on major tributary streams around its perimeter. The flows passing these stations make up

most of the surface inflows to the Delta and are the supply for: (1) diversions for use on the Delta Uplands, (2) consumptive use within the Delta area, (3) exporations by the Central Valley Project via the Delta-Mendota and Contra Costa Canals and exportation by the City of Vallejo, and (4) outflow for salinity control. Rainfall on the Delta is an additional source of water supply. The total volume of water derived from rainfall is considered in this report as having been available for use in that area. It has also been assumed that the total volume of rainfall which occurred in a particular month was fully utilized during that same month.

Delta Uplands Diversions. The records in this report considered to be Delta Uplands diversions are the diversions to the uplands side of Old River, Tom Paine Slough, San Joaquin River between Stockton and Vernalis, and Cache Slough as well as diversions from tributary streams below the lowest gaging stations on those streams but outside the Delta Lowlands boundary. The diversions from the Cosumnes River below the McConnell gaging station, from the Mokelumne River below the Woodbridge gaging station, and from the Calaveras River below the Stockton gaging station are in this latter classification.

The records of these diversions are presented in the tables of diversion for their respective streams and are summarized in Table 7.

Consumptive Use of Water in Delta Area. Periodic land use surveys of the Delta have been made since 1924 and are published in the reports of Sacramento-San Joaquin Water Supervision. Prior to 1955, the last such survey was made in 1952 by the U. S. Bureau of Reclamation, but the results of that survey did not become available until after the publication of the 1952 Water Supervision Report. During 1955, land use survey presented in Table 219 (in pocket) was made of the entire Delta Service Area, both Lowlands and Uplands. Areas of the various types of crops, of classes of native vegetation, of levees and berms, of interior and exterior water surfaces, and of other nonagricultural areas were plotted on maps to a scale of 2,000 feet to the inch. Acreages of the individual crops and of other types of culture within islands or tracts were determined from appropriately delineated maps. Gross acreages of the various islands or tracts were furnished by the U. S. Bureau of Reclamation. These acreages have been determined by the Bureau of Reclamation to a high degree of accuracy from large scale aerial photographs in connection with their 1952 Delta studies. Acreages of nonagricultural areas including levees and berm, interior and exterior water surfaces, and residential areas were assumed to be the same as determined by the Bureau for 1952 except where differences were noted in 1955.

Certain crops and land uses in Table 219 which were considered as having the same rate of water consumption were grouped together under one classification as explained in column heading or in the notes at the end of each part of the table. The term "exterior water surface" signifies, in general, open water surface in uncontrolled channels of the Delta outside of the leveed islands or tracts. In contrast, "interior water surface" includes controlled channels, drains, ditches, lakes, and ponds within the leveed boundaries of islands or tracts.

Table 220, "Unit Consumptive Use of Water in Sacramento-San Joaquin Delta," presents monthly unit consumptive use factors in acre-feet per acre for crops, vegetation, and evaporation in the Delta, developed largely from experimental data. In the data and discussions presented herein, the term "consumptive use" is used in the absolute sense. It represents the amounts of water consumed irrespective of source and, therefore, includes amounts consumed from rainfall. No attempt has been made in this report to evaluate the net amounts of water consumed from Delta Lowlands channels exclusive of rainfall.

The unit consumptive use factors in Table 220 were developed from extensive experimental investigations in the Delta in 1924 and subsequent years. The factors are the same as those presented for the crops listed in Table 1 of the Division of Water Resources Bulletin 27 with the exception of corn and grain. The factors for corn and grain were modified on the basis of more recent information. Factors for irrigated pasture, levees and berms, and crops not included in Table 1 of Bulletin 27 were furnished by the U. S. Bureau of Reclamation. Factors for Tules and swamps, native vegetation, and evaporation from water surfaces were derived from a report dated January 1955 entitled, "Rates of Evaporation and Consumptive Use in the San Francisco Bay and Adjacent Areas," prepared by Dean C. Muckel and Harry F. Blaney of the U. S. Agricultural Research Service under a cooperative agreement with the Division of Water Resources. The factor for idle crop land was obtained from the 1938 Report of Sacramento-San Joaquin Water Supervision and is a revision of the corresponding factor contained in Table 1 of Bulletin 27. The figures shown are applicable to the Delta area for average conditions and do not necessarily agree with unit consumptive use factors determined for other areas in the Central Valley.

Table 221, "Consumptive Use of Water in the Delta Service Area," presents the monthly amounts of water in acre-feet consumed by various types of culture and by evaporation from open water surfaces. The quantities shown in Table 221 were computed by multiplying the acreages from Table 219 by the unit consumptive use factors from Table 220. The total water-consuming acreage of the Sacramento-San Joaquin Delta Service Area based on the 1955 survey is segregated as follows:

	Acres
Total irrigated cultivated crops, not including double- or inter-crops	573,491
Total idle lands including aquatic growths and and interior water surfaces	38,361
Total exterior channel water surfaces within Delta Area	42,168
Total Urban	20,086
Total water consuming acreage, 1955	674,106

Exportations. Exportations from the Sacramento-San Joaquin Delta are those amounts of water diverted from Delta channels and transported by canal systems or pipe lines to areas outside of the Delta for agricultural, industrial, or municipal uses.

Exportations are made from the Delta by the U. S. Bureau of Reclamation in their operation of the Central Valley Project and by the City of Vallejo. The exportations for

Central Valley Project operation are accomplished by diverting water from Old River at the U. S. Bureau of Reclamation's Tracy Pumping Plant to the Delta-Mendota Canal and at that agency's Pumping Plant No. 1 on Rock Slough to the Contra Costa Canal. The exportations by the City of Vallejo for municipal and other uses are made by pumping water from Cache Slough.

Tables 174 and 175 present records of daily mean diversions in second-feet to the Delta-Mendota Canal and to the Contra Costa Canal. The locations of the two pumping plants are shown on Plate 4.

The exportations from the Delta in acre-feet per month by the Central Valley Project canals and by the City of Vallejo are summarized in Table 202 under the heading "Exportations."

Gross Duty of Water

The term "gross duty of water," as used in this report, is defined as being the total amount of water diverted to serve one acre of irrigated land. The gross duty for any particular period may be expressed as the amount of water diverted in acre-feet per acre irrigated, or, conversely stated, may be expressed as the number of acres irrigated per one second-foot average diversion rate. The gross duty of water includes not only the net amount of water consumed by plants in their processes of transpiration and growth, but also includes all irrecoverable losses through evaporation, percolation, and conveyance. It also includes water to maintain fresh water and warming ponds in the growing of rice and water which returns to a drainage channel to become available for reuse. Gross duty of water figures for the individual stream channels covered by Water Supervision work are given for the Sacramento and San Joaquin Valleys in Table 177.

The diversion quantities listed in this report are the gross diversions in acre-feet as measured into the distribution system at its head. The gross diversions include leakage or regulatory spills, if such occurred, from the distribution system below the point of measurement. Regulatory spills which may have been made at the point of diversion are not included in the gross diversion quantities except as otherwise noted in the footnotes under the table in which the point of diversion is listed.

SALINITY INVESTIGATIONS

The intrusion of saline water from San Francisco Bay into the channels of the Delta from which irrigation supplies are derived, is a matter of extreme importance. During 1955, Sacramento-San Joaquin Water Supervision maintained, under a cooperative agreement with the U. S. Bureau of Reclamation, a program of observations of the saline content of the water at a number of stations throughout the Delta and upper San Francisco and Suisun Bay areas which are listed in Table 223. A history of the salinity observation program has been presented in prior Water Supervision reports.

Purpose

A purpose of the salinity investigation since 1924 has been to record the occurrence and extent of salinity encroachment from San Francisco Bay into the Delta and to

establish the relation between movement of salinity, stream flow entering the Delta, and tidal action.

During 1955 the continuous observations of salinity also served as an aid to the U. S. Bureau of Reclamation in determining the amounts of release from Shasta Lake and Folsom Reservoir.

Scope

The general scope of this investigation each season has been such as to insure that samples of water to be tested for salinity are taken at regular intervals at a sufficient number of stations throughout the Delta and upper Bay region so that the advance and retreat of the salinity from early summer to late fall is completely recorded. The records of samples taken during 1955 from the active sampling stations are presented in Table 224.

Plate 4 shows the location of the sampling stations and the limit of maximum seasonal encroachment of salinity into the Delta of water having 1000 parts of chloride per million parts of water for the years 1931, 1938, 1944, 1947, 1952, 1953, 1954, and 1955. Lines for 1931 and 1938 are delineated to show the limits of maximum seasonal encroachment for a low and high runoff year, respectively, prior to the operation of Shasta Lake. The lines for 1944 and 1947 are delineated to show the greatest encroachment subsequent to the operation of Shasta Lake.

The maximum salinity as recorded at the stations in 1955 is shown in Table 222. For comparative purposes, this table shows also the maximum salinity recorded at these stations in representative years before and after Shasta Reservoir operation. Only presently indicative and active stations are included in this comparison.

Salinity Bulletins

During 1955 a salinity bulletin was mailed each month to many cooperating agencies and individuals giving the results of samples taken and analyzed at four-day intervals at all stations. The figures given were the laboratory determination of the number of parts of chloride per million parts of water.

Flows Available for Salinity Control

The present method of controlling the intrusion of saline water from Suisun Bay into the Delta is to provide a rate of fresh water outflow from the Delta of sufficient quantity to neutralize the rate of intrusion of salt water. The rate of fresh water outflow to accomplish this purpose is not susceptible of measurement by the same methods used at upstream gaging stations. In September, 1954, a special 17-day continuous tidal cycle measurement of Delta outflow was made by the Division of Water Resources. The results of that measurement, which were discussed in the 1954 Water Supervision report, indicate that an estimate of the net surface outflow (including unmeasured accretions) from the Delta available for salinity control can be computed by subtracting from the total measured surface inflow to the Delta all of the demands on that supply consisting of consumptive use within the Delta area, of measured diversions to Delta Uplands, and of measured exportations to land beyond the Delta. Table 7 presents a summary of the water supply to, diversions and exportations

from the Delta as measured during 1955, an estimate of the consumptive use of water in the Delta area based on the 1955 crop survey, and computed Delta outflow.

COMPLETE OR PARTIAL ANALYSES OF SURFACE WATERS

There is included in this report a tabulation of the results of complete or partial chemical analyses of samples of water taken periodically at many points within the Sacramento and San Joaquin Valleys and in the Delta during 1955. The results for each sampling point are grouped together and presented in geographical arrangement in Table 225. These results were furnished in part by the U. S. Bureau of Reclamation and in part by the Water Quality function of the Division of Water Resources as noted in the table. Results furnished by the Water Quality function were analyzed by the U. S. Geological Survey Laboratory under a co-operative agreement with the Division of Water Resources and must be considered as "preliminary data, subject to revision." The methods of collecting and analyzing these samples are appreciably different and more complex than the methods employed in determining the chloride component as part of the regular salinity observation activities in the Sacramento-San Joaquin Delta.

TABLES

TABLE 1

MONTHLY PRECIPITATION
JANUARY THROUGH DECEMBER - 1955

In Inches

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Shasta Dam	1955	6.32	2.59	.95	7.04	.09	.02	.06	.00	.36	.73	11.38	33.98	63.52
	Normal	11.73	11.00	7.44	4.28	2.41	1.34	.10	.22	.96	4.30	6.39	11.69	61.86
Redding Fire Station 2	1955	4.00	.88	.88	3.07	.05	.02	.00	.00	.50	.40	9.17	14.96	33.93
	Normal	8.34	6.48	5.59	2.80	1.83	.98	.06	.14	.94	2.18	4.39	7.92	41.65
Red Bluff Airport	1955	2.96	.09	.50	1.68	.18	.26	.08	.00	1.11	.38	3.63	7.71	18.58
	Normal	4.35	3.45	2.92	1.55	1.00	.49	.03	.06	.52	1.17	2.39	4.25	22.18
Orland	1955	2.22	.25	.68	2.25	.00	.12	.12	.00	.10	.32	2.67	7.71	16.44
	Normal	3.57	3.02	2.40	1.28	.56	.35	.02	.04	.32	.86	1.81	3.60	17.83
Chico Experiment Station	1955	3.01	.77	.60	3.79	.12	.18	.00	.00	.20	1.02	3.08	11.71	24.48
	Normal	5.02	4.38	3.29	1.91	1.03	.44	.02	.05	.40	1.20	2.62	4.96	25.32
Colusa	1955	1.93	.26	.57	1.16	.12	.00	.00	.00	.17	.55	1.92	7.19	13.87
	Normal	3.06	2.73	2.13	1.02	.50	.21	.01	.02	.23	.68	1.64	3.14	15.37
Marysville	1955	3.43	1.05	.31	2.32	.35	T	T	.00	.47	.77	2.41	11.30	22.41
	Normal	4.05	3.63	2.88	1.42	.76	.24	T	.02	.23	.94	2.16	3.99	20.32
Woodland	1955	2.75	1.74	.40	2.12	.43	T	.00	.00	.89	.46	1.30	11.71	21.80
	Normal	3.54	2.96	2.21	1.11	.49	.17	T	.01	.20	.67	1.56	3.24	16.16
Folsom	1955	4.60	2.08	.25	2.92	.45	.00	.00	.00	.43	.69	*1.81	13.75	*26.98
	Normal	5.04	4.34	3.57	1.76	.84	.25	.01	.01	.25	1.02	2.30	4.24	23.63
Sacramento City	1955	3.14	1.33	.37	2.75	.67	.01	.00	.00	.95	.57	1.16	12.20	23.15
	Normal	4.02	3.26	2.60	1.39	.67	.18	.01	.02	.24	.76	1.70	3.49	18.34
Davis	1955	2.68	1.24	.40	2.17	.64	T	.00	.00	.92	.44	1.16	11.87	21.52
	Normal	3.67	3.00	2.28	1.14	.49	.16	T	.01	.18	.65	1.50	3.29	16.37
Bensons Ferry	1955	2.28	1.14	.40	2.24	.47	.00	.00	.00	.44	.33	1.22	8.77	17.29
	Normal	3.20	2.63	2.28	1.12	.58	.15	T	T	.20	.68	1.41	2.83	15.08
Lodi	1955	3.40	1.39	.17	3.09	.51	T	.00	.00	1.10	.13	1.21	9.45	20.45
	Normal	3.39	2.74	2.43	1.20	.58	.13	T	T	.19	.79	1.50	3.14	16.09
Antioch	1955	2.59	1.26	.92	1.40	.74	.00	.00	.00	.03	.15	.81	7.55	15.45
	Normal	2.79	2.23	1.81	.78	.36	.11	.01	.01	.21	.51	1.15	2.62	12.59
Stockton Fire Station 4	1955	3.84	1.03	.57	2.38	1.02	.00	.00	.00	.01	.12	1.30	8.42	18.69
	Normal	3.03	2.33	2.11	.99	.53	.12	.01	.00	.20	.60	1.31	2.68	13.91
Tracy Carbona	1955	2.94	.77	1.91	1.12	.83	T	.00	.00	.00	.03	.98	4.99	13.57
	Normal	1.81	1.46	1.37	.66	.41	.10	T	T	.13	.39	.78	1.65	8.76
Modesto	1955	3.61	.75	.26	2.56	.46	.00	.00	.00	.26	.02	1.09	6.34	15.35
	Normal	2.29	1.99	1.97	.93	.45	.11	.01	.02	.16	.50	1.02	2.31	11.76
Merced Fire Station 2	1955	3.65	.67	.18	.96	1.06	.00	.00	.00	.00	.02	.57	7.71	14.82
	Normal	2.46	2.12	1.99	1.03	.44	.08	.01	.01	.12	.47	1.15	2.03	11.91
Los Banos	1955	2.80	.74	.27	.87	.85	.02	.00	T	.00	.03	.76	5.47	11.81
	Normal	1.80	1.43	1.44	.73	.30	.05	.01	.01	.10	.38	.83	1.56	8.64
Fresno Airport	1955	3.51	1.46	.07	1.47	.63	.00	T	T	.00	T	1.34	6.73	15.21
	Normal	1.90	1.61	1.68	.87	.32	.11	.01	.01	.08	.51	.80	1.63	9.53

T - Trace.
* - Estimated.

1955 records from U. S. Weather Bureau. Normals are based on the 50-year period 1905-1955.

TABLE 2

SEASONAL RUNOFF IN PER CENT OF NORMALS (a)

SACRAMENTO-SAN JOAQUIN RIVER SYSTEM

Water Year Ending September 30	Sacramento and San Joaquin Rivers to Delta	Sacramento River near Red Bluff	Sacramento River at Sacramento	Feather River near Oroville	Yuba River at Smartville	American River at Fair Oaks	Mokelumne River at Mokelumne Hill	Stanislaus River below Melones P. H.	Tuolumne River near La Grange	Merced River at Exchequer	San Joaquin River below Friant	San Joaquin River near Vernalis
Mean Annual Runoff (a) Thous. Ac.-Ft.	(b) 24001	8049	(b) 17498	4416	2320	2713	747	1160	1854	979	1762	(b) 5756
1920	57	52	52	50	56	54	63	64	73	70	75	71
1921	128	143	136	137	137	118	117	109	109	103	91	102
1922	111	83	103	115	128	121	124	123	134	146	134	134
1923	81	66	76	70	89	101	95	97	96	96	94	96
1924	31	41	33	29	26	20	25	22	29	26	25	26
1925	93	100	92	71	91	100	112	106	104	93	82	96
1926	65	70	68	72	69	51	50	52	60	62	66	61
1927	131	136	137	132	153	135	120	118	111	111	114	113
1928	91	95	96	96	105	93	86	82	82	75	66	76
1929	48	55	48	42	43	42	46	44	53	50	50	50
1930	72	76	77	88	78	61	62	63	62	52	50	57
1931	33	41	35	33	28	26	28	27	32	27	28	29
1932	85	63	75	74	91	96	100	117	114	114	117	115
1933	53	57	51	43	46	47	57	52	60	53	63	58
1934	47	56	49	46	43	41	40	37	44	37	40	40
1935	99	93	95	96	97	95	94	105	114	120	110	112
1936	103	88	99	97	112	125	120	114	117	118	106	113
1937	86	74	76	71	80	86	93	96	108	124	125	113
1938	184	182	181	193	174	165	166	176	185	212	209	195
1939	48	54	47	42	39	39	45	45	53	49	53	51
1940	124	130	128	127	123	126	115	121	120	112	107	115
1941	150	178	155	147	138	116	113	115	135	148	150	138
1942	140	140	144	150	147	144	132	128	128	131	128	128
1943	122	106	121	127	135	143	134	135	128	132	116	126
1944	61	58	59	63	60	54	60	58	71	70	68	67
1945	93	82	86	85	91	93	104	110	113	112	121	115
1946	100	100	100	94	103	106	100	102	102	96	98	100
1947	59	63	59	57	59	52	53	55	59	58	64	59
1948	86	95	90	87	87	83	85	77	76	70	69	73
1949	68	75	68	59	64	68	69	64	68	65	66	66
1950	83	71	82	87	96	98	101	93	84	73	74	81
1951	131	113	131	128	153	171	155	146	134	124	105	126
1952	164	143	163	179	178	183	177	165	165	160	173	167
1953	104	120	115	117	110	98	91	83	83	63	67	75
1954	92	115	100	95	83	74	71	77	78	68	72	74
1955	62	70	63	56	55	58	59	59	61	54	66	61

(a) 50-year normal taken as 50-year (1905-1955) mean seasonal unimpaired flow (Oct.-Sept., incl.).

(b) Summation of unimpaired flow at foothill stations on major tributaries only, and does not include runoff from minor tributaries and from valley floor.

TABLE 3

MONTHLY RUNOFF IN PER CENT OF NORMALS (a)
SACRAMENTO-SAN JOAQUIN RIVER SYSTEM

1954-55 Water Year

Month	(c)	Sacramento and San Joaquin Rivers to Delta (b)	Sacramento River near Red Bluff	Sacramento River at Sacramento (b)	Feather River near Oroville	Yuba River at Smartville	American River at Fair Oaks	Mokelumne River at Mokelumne Hill	Stanislaus River below Melones P. H.	Tuolumne River near La Grange	Merced River at Exchequer	San Joaquin River below Friant	San Joaquin River near Vernalis (b)
October	1954	92	110	99	90	59	53	18	65	31	34	26	35
	Normal	467	274	412	87	28	22	4	8	15	7	21	51
November	1954	93	126	101	91	51	38	28	41	42	33	67	47
	Normal	850	408	727	164	80	75	17	22	39	17	28	107
December	1954	90	110	94	74	70	78	65	59	76	56	63	65
	Normal	1532	715	1312	298	152	147	29	41	66	34	50	191
January	1955	50	52	48	43	42	49	46	55	64	50	58	58
	Normal	2392	1091	2042	443	238	270	43	68	105	60	74	307
February	1955	34	35	33	30	29	32	42	42	45	28	53	43
	Normal	2871	1280	2418	535	282	321	57	87	136	80	93	397
March	1955	40	39	39	42	37	38	44	39	43	33	51	42
	Normal	3285	1209	2609	665	332	404	85	137	196	110	147	590
April	1955	54	74	56	43	44	49	46	47	49	42	50	48
	Normal	3813	1034	2760	816	417	492	136	215	295	155	251	917
May	1955	83	95	86	75	87	89	84	76	81	77	77	78
	Normal	4070	720	2427	717	444	546	201	300	454	250	438	1442
June	1955	73	71	69	63	75	69	66	74	77	72	86	79
	Normal	2702	474	1390	358	240	319	138	199	382	190	404	1174
July	1955	60	85	75	74	57	50	27	44	30	37	48	40
	Normal	1093	326	625	153	62	83	31	62	133	59	184	438
August	1955	80	93	89	81	66	93	37	48	21	0	72	44
	Normal	514	266	410	99	24	20	4	14	23	12	52	100
September	1955	91	102	97	89	69	98	10	16	48	0	52	41
	Normal	411	252	367	80	21	14	2	6	10	5	21	41
Seasonal	1954-1955	62	70	63	56	55	58	59	59	61	54	66	61
	Normal	24001	8049	17498	4416	2320	2713	747	1160	1854	979	1762	5756

(a) Normals considered as mean values for 50-year period October 1905 through September 1955.
(b) Figures computed from summations of unimpaired flow at foothill stations on major tributaries only, and do not include runoff from minor tributaries and from valley floor.
(c) Normals are shown in thousands of acre-feet.

TABLE 4

SUMMARY OF MONTHLY STREAM FLOW, DIVERSIONS AND ACCRETIONS
SACRAMENTO RIVER AND TRIBUTARIES - 1955

Item	Mileage	Record in Table No.	Quantities in Acre-Feet											Annual Total
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
SACRAMENTO RIVER															
Sacramento River at Delta (a)		10	340[illegible]	37590	43590	75850	95660	28060	15170	10620	10520	11450	25690	265000	653260
Pit River near Montgomery Creek		11	165800	168600	205500	237800	223600	150200	132000	132800	146600	134100	157000	584000	2432300
McCloud River above Shasta Lake		12	74340	69980	81880	109100	126700	82400	61380	57230	54620	55330	61250	400400	1216610
Squaw Creek above Shasta Lake		13	120	6280	8240	22510	14710	3960	2250	1220	982	990	4170	103700	177162
Computed Inflow to Shasta Lake		14	338940	328700	375810	574280	506980	270250	218960	198210	206870	205670	293450	1869660	5387840
Unmeasured Accretions			+18900	+4540	-3860	+11520	+21220	-2950	-5160	-2860	+730	+4630	+3550	+74240	+121700
Change in Storage		15	-7500	-16100	+103300	+262700	+128600	-246500	-168700	-123000	-214900	-123000	-24800	-1059000	+221900
At Keswick	250.5	16	305400	267200	216200	328100	381100	513300	66150	221500	422500	333300	272200	884500	5287700
Near Redding	240.7	17	372200	269800	203300	291900	348800	486800	72800	593600	396200	310100	251900	930800	5158200
Clear Creek near Igo	237.1R	32	17350	12600	10330	27500	22190	6420	2970	1330	1200	1570	6700	143700	253860
Cow Creek near Millville	228.8L	33	42510	21490	15530	36400	26720	5340	1430	595	1280	2740	34550	156300	387325
At Bells Ferrye	224.5	18	476300	320000	246900	396600	411100	500900	666000	584500	396100	317000	337100	1272000	5624500
Cottonwood Creek near Cottonwood	222.2R	34	52020	27360	20460	33530	39730	13270	5490	3600	4120	4960	10680	29400	515620
Battle Creek near Cottonwood	221.5L	35	22350	16720	18810	19060	26200	17380	11350	7730	9670	10730	16960	83170	262170
Paynes Creek near Red Bluff	201.5L	36	7910	2920	1560	2340	1150	144	7	3	132	189	1650	26580	44585
Unmeasured Accretions			+57814	+21004	+12555	+37152	+18858	+10037	+14308	+17712	+19586	+12368	+26526	+165117	+453197
Diversions			194	154	5145	25382	28648	29491	30455	30270	26988	24357	10206	167	211457
Near Red Bluff	198.6	19	565200	369200	290700	458700	547300	536900	686900	624200	431500	341500	385100	1816000	6993200
Redbank Creek at Foothills	191.2R	37	1635	451	242	1306	550	9	0	0	0	0	360	12250	16803
Antelope Creek near Red Bluffs	190.3L	38	7840	4430	4310	6610	6800	2920	2050	1840	1860	1910	2510	11630	65220
Antelope Creek near Mouth	182.0L	39	7410	1592	1235	4215	2011	410	540	195	212	795	2230	19260	60242
North Fork Mill Creek near Mouth	179.3L	40	138	82	290	877	121	97	66	13	121	119	440	2415	4199
Mill Creek near Los Molinos	179.0L	41	12250	9460	12700	17200	24460	15140	7850	5940	5530	5820	8280	78550	203180
Mill Creek near Mouth	179.0L	42	13020	6904	8214	11070	10530	6078	101	0	267	1170	6835	86960	159749
Elder Creek near Gerber	178.5R	43	3330	1660	1500	4800	3700	244	1	0	0	0	1250	40720	57205
Thomes Creek at Paskenta	173.2R	44	11210	8810	8890	12570	22370	4350	976	152	75	194	4600	121200	199397
Deer Creek near Vina	168.5L	45	12510	9170	11990	21330	20140	7600	5900	5040	4940	5320	7100	112300	222250
Deer Creek at Highway 99E	168.5L	46	12090	7049	9780	14210	12150	512	140	62	85	101	4766	89760	153005
Unmeasured Accretions			+70457	+41852	+33811	+16549	+20813	+14415	+6225	-22383	-8752	-8341	-3634	+171405	+362377
Diversions			0	0	92	87	345	315	749	539	215	120	15	0	2477
At Vina Bridge	168.5	20	691100	443500	355600	523000	565200	563400	694200	601700	423300	352900	409200	2383000	6003700
Unmeasured Accretions			-10200	-5272	+4098	+15736	+12588	-11104	-11002	+10125	+15069	+5689	-866	-172000	-151789
Diversions			0	28	17698	100236	128788	134596	139138	135525	69169	46789	18734	0	776901
At Hamilton City	149.5	21	680900	431200	341800	433100	449000	417700	543400	476300	369200	311800	389600	2211000	7055000
Big Chico Creek near Chico	141.5L	47	6460	4850	6250	11200	5950	2170	1690	1420	1320	1720	2350	62010	107430
Big Chico Creek near Mouth	141.5L	48	5381	3695	4629	7417	1577	412	28	0	0	0	310	49620	75073
Stony Cr. below Black Butte Dam Site	138.0R	49	5227	5543	5316	10907	18120	20330	19500	17940	13770	1900	869	126200	259591
Stony Creek near Hamilton City	138.0R	50	5930	5010	648	3200	1940	0	0	0	0	0	0	143800	163728
Unmeasured Accretions			+55905	+16201	+834	+2600	+10665	+7410	+17635	+21082	+322	+4594	+17797	+80691	+258736
Diversions (b)			16	10	111	1717	3982	3122	5563	6082	1522	394	207	111	26137
At Ord Ferry	130.8	22	761100	456100	347700	448600	467200	422400	555500	491300	368000	316000	407500	2485000	7526400
Unmeasured Accretions			-50888	-13900	+7542	-12109	-11052	-13090	-15667	-7223	+5165	-288	-23846	-75696	-214058
Diversions			212	0	542	1321	1294	1704	15733	15377	5665	1112	354	1304	81642
At Butte City	115.8	23	710000	442200	354300	423200	440200	394600	524100	468700	367500	314000	383300	2408000	7230700
Opposite Moulton Weire	103.3	24			382800	441900	433700	389100	511100	459200	373500	320000			
Unmeasured Accretions			+5200	+4967	+10284	-2959	+16216	+3961	-7904	+5837	+7553	+10532	-1583	-96855	-44781
Moulton Weir	104.0L	51	0	0	0	0	0	0	0	0	0	0	0	163900	163900
Colusa Weir	92.4L	52	0	0	0	0	0	0	0	0	0	0	0	866000	866000
Diversions			0	367	664	14831	22916	27201	31296	25037	7653	732	317	645	132319
At Colusa	89.4	25	715200	446800	363900	405100	433500	371300	484900	448900	367400	324400	381400	1286000	6029100
Butte Creek near Chico	84.0L	53	18490	14240	18450	26700	34200	14060	9440	7930	8040	6990	9070	125700	290310
Butte Slough to Sacramento River	84.0L	54	27800	19750	21690	11910	31000	11900	614	3210	21410	4667	10190	15810	180011
At Meridiane	79.8S	26	772500	491200	387300	410000	403600	388000	484400	450000	381200	322800	347700	1375000	6333700
R. D. 70 Drain	68.8L	55	957	460	673	1690	2680	1710	3253	3652	4052	584	455	3158	23534
Unmeasured Accretions			-23957	-5010	-4008	-2201	+13785	+5435	+15502	-9617	-12364	-9024	-4016	+68832	+33357
Tisdale Weir	64.2L	56	0	0	0	0	0	0	0	0	0	0	0	417900	417900
Diversions			0	0	2255	48499	82625	81945	93469	85345	28498	3827	39	0	426502
Below Wilkins Slough	62.9	27	720000	462000	380000	368300	398600	308400	410800	360800	352000	316800	388000	955900	5421600
Above R. D. 108 Drain Plante	40.4	28			374200	361400	387900	306200	400800	363000	357600	315500			
R. D. 108 Drain	41.0R	57	3007	1611	1458	7018	249 0	16650	21020	24040	15470	1006	482	9163	125895
R. D. 787 Drain	37.0R	58	241	250	87	759	1523	1000	1207	1349	749	20	0	2855	10532
Colusa Basin Drain	34.15R	62	22470	5237	7301	22550	50070	21790	32310	49130	2270	26520	25750	9582	356480
Sycamore Slough	34.15R	63	206	114	60	1292	1517	1095	1330	1022	870	51	25	134	9531
Unmeasured Accretions			+47076	+33988	+16902	+16021	+12342	+23195	+18550	+24980	+9656	+12713	+13328	-3849	+218902
Diversions			0	0	410	20480	37342	37530	43817	41021	13565	110	05	0	196340
At Knights Landing	34.0	29	793400	547200	407100	397500	457700	338600	441400	421400	435500	357000	427500	975000	5954000
Sacramento Slough	21.2L	68	32860	20110	14280	25180	47980	38330	29300	32330	48520	14320	20140	NR	
Feather River at Nicolaus	20.9L	73	331000	202500	288100	332100	557200	447300	20210	22840	43370	75070	130000	2372000	4528890
Coon Creek at Highway 99E	19.6L	81	13130	4282	3140	3005	1839	235	152	281	596	1155	1579	36090	65484
Auburn Ravine at Lincoln	19.6L	82	6772	2691	2045	1115	1821	2615	3568	3548	1640	367	987	13560	41002
Natomas Cross Canal at Head	19.6L	83	25910	6918	5516	3129	1611	159	01	90	1118	450	2088	5110	106090
R. D. 1001 Drain	19.6L	84	1505	230	155	321	1045	0	0	0	0	0	0	NR	
Unmeasured Accretions			-20735	-12364	+3426	-14654	-9218	+5513	-3021	+9507	+4793	-19205	-28727	+1452890	+1361640
Fremont Weir	23.0R	64	0	0	0	0	0	0	0	0	0	0	0	2793000	2793000
Diversions (c)			0	0	147	4171	16318	15102	19710	17307	9301	335	101	0	82552
At Verona	19.6	30	1188000	714600	718800	739400	1040000	510800	473700	468800	524000	428400	551500	2066000	9426000
R. D. 1000 (Pritchard Lake) Drain	19.0L	85	282	0	22	0	0	0	24	0	1380	69	0	3520	5297
R. D. 1000 (#3) Drain	6.8SL	86	28	388	414	566	1665	1789	2057	1116	2844	1118	709	1829	16517
R. D. 1000 (2nd Bannon Slough) Drain	2.1L	88	4485	1402	518	871	1220	583	0	129	5814	127	0	11670	28819
Linda Creek near Roseville	1.3L	89	11230	5216	3447	3223	2428	1129	955	818	1581	1928	2196	28030	63781
American River at Sacramento	1.1L	87	162600	101500	100700	63830	264000	223600	110200	128400	03020	47000	31920	894300	2191370
Unmeasured Accretions			+35643	+18098	+18674	+25289	+47306	+22253	+5625	-6869	+6670	+12133	+16241	+2186	+225419
Sacramento Weir	4.2R	87	0	0	0	0	0	0	0	0	0	0	0	584500	584500
Diversions (d)			2508	2004	2875	13493	28019	35258	39701	39514	19509	4175	3666	5035	196473
At Sacramento	0.4	31	1400000	813200	839600	819600	1 28000	725200	552800	554900	5858[illegible]	480600	568900	2437000	11107900
Shasta Lake to Sacramento															
Total Unmeasured Accretions			+195685	+90104	+109728	+106929	+138023	+50069	+34131	+43441	+48428	+42483	+42038	+1708901	+2624980
Total Diversions			2990	2563	10839	25118[illegible]	362531	373320	419071	390677	184085	61951	33704	7262	2152800

* Not included in computations of unmeasured accretions.
(a) Above Shasta Lake
(b) Includes diversions from Stony Creek by Glenn-Colusa Irrigation District.
(c) Includes diversions from Feather River below Nicolaus.
(d) Includes diversions from American River below "H" Street Bridge.

TABLE 4

SUMMARY OF MONTHLY STREAM FLOW, DIVERSIONS AND ACCRETIONS
SACRAMENTO RIVER AND TRIBUTARIES - 1955 (contd.)

Item	Mileage	Record in Table No.	Quantities in Acre-Feet												Annual Total
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
FEATHER RIVER															
Near Oroville	71.0	69	144300	111000	202400	272800	425700	179300	124100	112400	91990	96180	120600	1767000	3647770
Unmeasured Accretions			-4800	-6300	-16130	-10972	-21757	+7418	-532	-1785	-2312	-1432	-7493	-104000	-170095
Diversions			0	0	6770	87728	132443	131758	119597	105910	56258	39128	12207	0	691799
Near Gridley	49.7	70	139500	104700	179500	174100	271500	54960	3971	4705	33420	55620	100900	1663000	2785876
South Honcut Creek near Bangor	43.7L	74	2470	1320	906	1640	492	74	4	0	0	0	100	18170	25296
Unmeasured Accretions			+57830	+17380	+12258	+39737	+74619	+26512	+17650	+15868	+10742	+14883	+10352		
Diversions			0	0	524	1077	511	1376	6345	5783	1782	73	12	0	17483
At Yuba City	28.0	71	199800	123400	192200	214400	346100	80170	15280	14790	42380	70430	111400		
Yuba River near Marysville	27.3L	76	92280	68230	94730	127800	234800	76490	17040	14180	5110	5460	19140	1066000	1821260
Unmeasured Accretions			-36980	+1370	+29613	+6497	-50740	-1470	-41	-2042	-1195	+4244	+5360		
Diversions (a)			0	0	43	197	260	490	709	588	185	14	0	0	2486
Below Shanghai Bend	23.0	72	255100	193000	316500	348500	529900	154700	31570	26340	46110	80120	135900		
Bear River near Wheatland	12.0L	80	34250	21240	14060	6040	14530	1990	484	311	310	1900	2440	213400	310955
Dry Creek near Wheatland	12.0L	79	9930	1860	1140	1100	305	3	0	0	378	324	359	37860	53259
Unmeasured Accretions			+31720	-13600	-43140	-20179	+18629	-3396	+474	+1852	-965	-6222	-8080		
Diversions (b)			0	0	480	3361	6164	5997	6318	5663	2463	452	19	0	30897
At Nicolaus	9.3	73	331000	202500	288100	332100	557200	147300	26210	22840	43370	75070	130600	2372000	4528890
Oroville to Nicolaus															
Total Unmeasured Accretions			+47770	-1150	-17399	+15083	+20751	+29064	+17551	+13893	+6270	+11473	+139		
Total Diversions			0	0	7797	92363	139378	139621	132969	117944	60688	39667	12238	0	742665
AMERICAN RIVER															
North Fork American River at N.F. Dam		90	29510	23660	37010	58450	102900	40480	7350	2840	2220	2330	5790	317400	629960
Middle Fork American River near Auburn		91	40070	36270	60800	97710	200700	87000	15160	5230	3720	3760	8630	481100	1040150
South Fork American River near Lotus		92	37200	30990	44650	74660	152000	78390	14710	9600	9380	9590	11150	360900	833220
Weber Creek near Salmon Falls		93	10780	5100	3460	5320	2960	278	90	3	21	54	557	46440	75123
Computed Inflow to Folsom Reservoir		94			164110	245610	486450	218480	41720	26400	26780	36010	49080	1261220	
Unmeasured Accretions					+3990	-4230	-14090	-10350	-12530	-8470	-2580	-750	-850	-9190	
Diversions						1950	5260	5630	6090	6090	5390	4160	2820	1630	
Change in Storage		95			+66400	+173400	+206600	-21700	-86300	-120800	-44100	-18200	+12700	+347300	
At Fair Oaks	19.2	96	104100	101700	101700	06030	260500	224200	109400	132700	62910	49300	32710	903100	2208350
Unmeasured Accretions			-1500	-200	-977	-2093	+3764	+776	+2066	-3326	+742	-2010	-654	-8800	-12212
Diversions				0	23	107	264	1076	1266	974	632	290	136	0	4768
At Sacramento	6.1	97	102600	101500	100700	03830	264000	223900	110200	128400	63020	47000	31920	894300	2191370
Folsom Reservoir to Sacramento															
Total Unmeasured Accretions					+3013	-0323	-10326	-9574	-10464	-11796	-1838	-2760	-1504	-17990	
Total Diversions			0	0	23	2057	5524	6700	7356	7064	6022	4450	2956	1030	43788
SUTTER BY-PASS															
Butte Slough to Sutter By-Pass	29.4	65	39680	8079	6210	14890	12000	10550	10560	9356	6005	3195	8319	1158000	1286850
Wadsworth Canal	25.7L	66	5702	2819	1713	5361	9130	7860	3191	3957	9406	5740	3076	23320	81275
R. D. 1500 Drain	0.0R	67	6902	4006	2642	3620	18040	53730	70790	70080	29730	4596	1862	19910	287968
Tisdale Weir	18.9R	56	0	0	0	0	0	0	0	0	0	0	0	417900	417900
Unmeasured Accretions			+6903	+5146	+4273	+7998	+27756	-13530	-30495	-25126	+12981	+2565	+7923		
Diversions			27	0	564	0089	18948	20380	24186	25937	9602	1776	1040	459	109508
Sacramento Slough	-1.0	68	62800	20110	14280	25180	47980	36330	29360	32330	48520	14320	20140		
BACK BORROW PIT															
Colusa Trough at Highway 20	37.0	59	18920	7656	7432	29740	56990	31650	40830	50860	55600	22200	21850	83140	427068
Unmeasured Accretions			+1320	+280	+2122	+4219	+10206	+7312	+8480	+12018	+10992	+2044	-693	+4378	+02678
Diversions			0	0	212	3069	4876	7542	9310	8108	2442	1414	777	608	38358
Back Borrow Pit at College City	22.7	60	20240	7936	9342	30890	62320	31420	40000	54770	64150	22830	20380	87110	451388
Unmeasured Accretions			+7928	+1301	-1908	-235	+4379	+2651	+5997	+6439	+11489	+4232	+5883	-5125	+43031
Knights Landing Ridge Cut	0.4R	61	5657	0	114	4132	4673	5712	6966	5381	1980	0	44	72090	106749
Diversions			41	0	19	3973	5956	6569	6721	6198	1389	542	469	313	32190
Colusa Basin Drain	0.0	62	22470	9237	7301	22550	56070	21790	32310	49630	72270	26520	25750	9582	355480
Highway 20 to Outfall Gates															
Total Unmeasured Accretions			+9248	+1581	+214	+3984	+14585	+9903	+14477	+18457	+22481	+6276	+5190	-747	+105709
Total Diversions			41	0	231	7042	10832	14111	16031	14306	3831	1956	1246	921	70548
YUBA RIVER															
At Englebright Dam	22.8	75	67300	57270	89570	130300	249400	100700	43170	38830	15390	13450	23070	935400	1763850
Deer Creek near Smartville	21.8	77	7610	4100	2890	3650	1300	302	282	297	300	383	1210	59030	81354
Dry Creek near Virginia Ranch	11.0	78	7730	4520	3280	5510	1830	399	423	445	165	88	219	54300	78969
Unmeasured Accretions			+10909	+2340	-127	+1603	+2804	+1805	+3937	+845	+3205	-229	+786	+19963	+48021
Diversions			1269	0	883	13323	20594	26776	30772	26237	13950	8232	6145	2753	150934
Near Marysville	5.2	76	92280	68230	94730	127800	234800	76490	17040	14180	5110	5460	19140	1066000	1821260

(a) Includes diversions from Yuba River below Mile 5.2.

(b) Includes diversions from Bear River below Wheatland.

TABLE 5

SUMMARY OF MONTHLY STREAM FLOW, DIVERSIONS AND ACCRETIONS
SAN JOAQUIN RIVER AND TRIBUTARIES - 1955

Item	Mileage	Record in Table No.	Quantities in Acre-Feet												Annual Total
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
SAN JOAQUIN RIVER															
Inflow to Millerton Lake (Computed)		123	66369	59695	82810	117606	214506	216510	105576	72460	55156	35845	34778	400990	1462307
Unmeasured Accretions			+204	-259	-674	-1668	-2433	-4319	-4801	-4231	-1581	-948	-657	+2823	-18544
Change in Storage		124	+61900	+43600	-27600	+21200	+128400	+30400	-136900	-152800	-64700	-100	-19300	+309200	+237900
Madera Canal	259.13R		0	517	18706	16220	12192	3104	53302	52112	34351	0	0	0	218814
Friant-Kern Canal	269.63L		153	11839	87015	77125	64015	13078	166887	156912	74396	27907	10471	173	811571
Diversions			0	0	1	13	0	9	16	25	8	0	0	0	78
Below Friant	268.13	125	4520	3180	4020	7400	7460	9940	11470	11980	9520	7090	4350	94440	175370
Little Dry Creek near Friant	264.40L	135	511	341	262	105	89	0	1	0	0	0	2	7750	9061
Unmeasured Accretions			+1121	+350	-268	-1185	-906	-1423	-1590	-2070	-2102	-1367	-236	+3516	-6210
Diversions			2	1	324	980	733	2417	3151	2690	1788	813	196	6	13311
Near Biola	21 .4	126	150	3880	3690	5340	5850	6100	6720	7020	5630	4910	3420	105700	104910
Unmeasured Accretions			-1618	-1946	-2195	-3105	-3545	-4438	-4880	-5024	-4240	-3746	-3027	-32508	-70296
Diversions			0	0	21	59	10	2	106	153	71	28	20	0	500
At Whitehouse	219.83	127	4532	1934	1474	2116	2891	1630	1734	1843	1319	1176	873	73192	94114
Delta-Mendota Canal (a)			0	12934	79899	104112	124218	150349	154278	151585	95447	57896	18383	94435	958536
Unmeasured Accretions			-037	-4902	-14644	-8545	-13873	-20488	-22316	-24105	-11409	-5360	-2728	-10588	-139660
Diversions (.)			305	5811	55472	82150	94463	106358	108017	103845	66976	44270	12198	10635	694100
Near Mendota	206.2	128	3590	4155	11252	15533	18173	25133	25079	25418	16381	7442	4330	61404	217890
Unmeasured Accretions			+587	+1451	-597	+891	+1046	+2108	+1058	+372	+1106	+901	+357	-16077	-6197
Diversions			0	520	10633	16424	17819	27241	26137	25746	17487	8343	4687	2920	160001
Near Dos Palos	186.0	129	4177	5086	22	0	0	0	0	0	0	0	0	42407	51692
Fresno River near Daulton	184.0R	136	4540	3730	4390	5390	8540	3470	753	34	0	37	630	58770	91284
Chowchilla River at Buchanan Dam Site	181.0R	137	4870	2060	2660	2480	3590	382	14	0	0	0	14	79040	95710
Mariposa Creek below Mariposa Dams		139	3701	986	1303	613	1136	5	3	0	0	0	0	25015	35754
Owens Creek below Owens Dam		140	666	250	139	157	182	0	0	6	6	0	0	3750	5256
Burns Creek below Burns Dams		141	4762	764	252	37	116	0	0	0	0	0	0	22705	28636
Bear Creek below Bear Dams		142	4489	NR	623	262	918	0	0	0	0	0	0	27479	
Salt Slough near Los Banos		138	4100	4320	4310	5860	6350	7080	6870	7190	6340	2930	2090	7380	64880
Unmeasured Accretions			+17853	+5180	+5560	+4996	+4837	+5755	+1632	+675	+618	+86	+730	+8493	+01015
Diversions			0	16	172	146	207	195	392	485	98	76	0	0	1647
At Fremont Ford	129.5	130	26190	14570	9720	10710	15920	12440	8110	7380	7000	2940	2420	58280	176340
Merced River near Stevinson	123.75R	146	18600	9530	9390	10710	9140	6810	6590	7480	7650	6780	6230	139200	236110
Unmeasured Accretions			+6332	+5153	+2379	+1453	+1927	+1824	+1252	+711	+410	-625	+732	+731	+22532
Diversions (c)			2	3	56	433	407	704	752	1041	716	295	52	11	4592
Near Newman	123.7	131	50120	29250	21430	22440	26520	20510	15200	14530	14110	10050	9730	198200	432390
Merced River Slough	122.2	147	0	0	0	0	0	0	0	0	0	0	0	39000	39000
Orestimba Creek near Newman		148	16	13	16	0	0	0	0	0	0	0	0	11140	11185
Unmeasured Accretions			+11183	+9218	+14387	+16030	+133 2	+13314	+14899	+14224	+13267	+9410	+6448	-109295	+20449
Diversions			0	91	101	6430	9004	13047	13339	14096	8675	1744	142	0	75319
Near Grayson	96.05	132	41319	38390	29732	30040	30278	20727	10760	14058	19002	17722	16036	139041	433705
Tuolumne River at Tuolumne City	91.0R	154	72109	69508	37924	20110	19012	17226	16204	16195	16145	21977	34750	294827	636409
Unmeasured Accretions			-1685	-5736	+2 00	+5165	+2241	+15200	+9449	+.487	+3337	+571	-3057	-39254	-682
Diversions (d)			1	05	9284	12276	13362	15804	18939	14213	8167	2386	374	32	94903
At Hatch Hatchy Crossing	82. 5	133	131742	102169	60972	43339	42109	37349	23534	23127	30367	37884	47355	394582	974589
Stanislaus River near Mouth	79.78	160	47090	28010	33850	12170	31590	59930	4530	3079	5018	7577	10360	283400	527204
Unmeasured Accretions			+3408	+6925	+3624	+3449	-434	-3349	+3048	+4854	+3566	+5117	+3517	-7382	+29271
Diversions (e)			0	4	2466	4408	3453	4930	5512	5170	2681	1428	522	0	30574
Near Vernalis	72.7	134	182300	136100	95980	54550	70740	89000	25600	20490	36270	49150	63710	670600	1500490
Millerton Lake to Vernalis															
Total Unmeasured Accretions			+35808	+14444	+10104	+17421	+12 26	+4184	-2249	-8167	+3178	+5335	+5079	-199545	-101722
Total Diversions			403	19167	190251	212044	218351	342089	397100	378732	217414	89290	28662	13777	2106640
MERCED RIVER															
At Exchequer		143	3210	2820	19040	66050	4500	105000	109200	102300	44030	2980	2500	135600	658430
Unmeasured Accretions			+422	-1374	-2031	-580	+2345	-5304	-0089	-3429	-1541	-2293	-2233	+20544	-1629
Merced Irrigation District Canals	40.6		0	0	16614	03833	05551	98075	101835	97875	41856	607	119	44	487009
Below Snelling	42.1	144	3632	1446	995	2231	1294	961	1276	996	633	80	148	156100	169792
Unmeasured Accretions			+11078	+4303	+4381	+4420	+4908	+4228	+4418	+3451	+4967	+.217	+3372	+13100	+08443
Diversions			0	1	46	756	1067	1883	1963	1976	1415	215	59	0	9301
At Cressey	27.6	145	15310	5748	5330	5895	5135	3306	3731	4471	4185	3082	3401	169200	228854
Unmeasured Accretions			+3299	+3799	+4943	+4440	+5850	+6153	+6230	+6030	+5708	+4544	+3397	-29724	+26075
Diversions			9	17	883	1625	1845	2649	3371	3027	2243	846	628	270	17419
Near Stevinson	4.5	146	18600	9530	9390	10710	9140	6810	6590	7480	7650	6780	6230	139200	238110
Exchequer to Stevinson															
Total Unmeasured Accretions			+15359	+6728	+7293	+14274	+13103	+9017	+4559	+8058	+3134	+4408	+4536	+6920	+93489
Total Diversions			9	18	17543	06214	08403	103207	107109	102478	45 14	1068	806	320	13809

* Not included in computations of unmeasured accretions
(a) Deliveries from Delta-Mendota Canal to Mendota Pool as computed by U. S. Bureau of Reclamation.
(b) Includes diversions from Fresno Slough and James By-Pass.
(c) Includes diversions from Merced River below Stevinson.
(d) Includes diversions from Tuolumne River below Tuolumne City.
(e) Includes diversions from Stanislaus River below Mile 1.9.

TABLE 5

SUMMARY OF MONTHLY STREAM FLOW, DIVERSIONS AND ACCRETIONS
SAN JOAQUIN RIVER AND TRIBUTARIES - 1955
(Continued)

Item	Mileage	Record in Table No.	Quantities in Acre-Feet											
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total
TUOLUMNE RIVER															
Above La Grange Dam		149	58850	68740	102900	98520	94710	132500	135300	117600	90410	27210	40700	310500	1277940
Unmeasured Accretions			+1000	-93	+1510	+1491	+879	+576	+375	+455	+490	-97	-280	-21870	-15564
Modesto Irrigation District Canal	53.5R		1230	17	24040	40570	34740	48720	50640	41370	27890	9070	5660	8350	291697
Turlock Irrigation District Canal	53.5L		20140	12570	62620	58390	59990	83760	85150	76290	62540	11050	14320	13580	560600
At La Grange	50.5	150	38280	56060	17750	1051	859	596	485	395	470	6993	20440	266700	410079
Unmeasured Accretions			+964	-610	+2258	+2269	+2315	+1874	+1532	+1669	+1858	+3020	+2964	+5800	+25913
Diversions			4	0	18	55	108	130	252	200	81	52	24	0	924
At Roberts Ferry Bridge	39.9	151	39240	55450	19990	3265	3066	2340	1765	1864	2247	9961	23380	272500	435068
Unmeasured Accretions			+6110	+3800	+3579	+3987	+4219	+3757	+4175	+4171	+3561	+2372	+2360	+3300	+45391
Diversions			0	0	19	38	37	97	144	144	72	63	0	0	614
At Hickman Bridge	31.7	152	45350	59250	23550	7214	7248	6000	5796	5891	5736	12270	25740	275800	479845
Dry Creek near Modesto	16.5R	155	19440	1882	1904	3178	2543	3384	2001	1946	1658	1418	1638	39230	80222
Unmeasured Accretions			+1850	+5519	+8388	+6653	+6406	+5386	+5572	+5870	+5784	+6111	+5389	-9530	+56398
Diversions (a)			0	1	122	245	237	450	409	427	288	159	7	0	2345
At Modesto	16.1	153	69640	66650	33720	16800	15960	14320	12960	13280	12890	19640	32760	305500	614120
Unmeasured Accretions			+2472	+2934	+4472	+4061	+3696	+3623	+4111	+3686	+3883	+2692	+2070	-10673	+27027
Diversions			3	4	208	451	644	717	807	771	578	355	80	0	4678
At Tuolumne City	3.35	154	72109	69580	37924	20410	19012	17226	16264	16195	16195	21977	34750	294827	636469
Above La Grange to Tuolumne City															
Total Unmeasured Accretions			+15396	+11550	+20207	+18461	+17515	+15216	+15765	+15851	+15576	+14098	+12503	-32973	+139165
Total Diversions			21577	12592	87087	99749	95756	133874	136802	119202	91449	20749	20091	21930	860858
STANISLAUS RIVER															
Below Melones Power House		156	36140	33530	46500	68260	121000	149100	74600	65850	17350	8620	7690	254300	882940
Unmeasured Accretions			+13516	+706	-272	+549	-9484	-5950	-2091	-738	+846	+3100	+3623	+16005	+19810
Oakdale Canal	58.6L		65	66	7480	15100	23680	28010	22170	20060	3910	136	723	165	121565
South San Joaquin Canal	58.6R		12170	10020	14200	49120	50310	05550	48710	42930	12790	7330	2560	3540	325230
Diversions			1	0	28	39	66	100	90	75	70	53	3	0	525
At Orange Blossom Bridge	47.0	157	37420	24150	24520	4550	31460	49490	1539	2047	1426	4201	8027	266600	455430
Unmeasured Accretions			+3670	+1930	+5401	+2974	+14465	+2628	+3803	+2634	+2365	+548	-1927	+31800	+60291
Diversions			0	0	181	251	145	458	530	482	195	46	9	0	2297
At Riverbank	33.6	158	41090	26080	29740	7273	35780	51660	4812	4199	3596	4703	6091	298400	513424
Unmeasured Accretions			+6454	+2143	+6003	+6088	+20514	+12725	+4500	+4533	+3934	+3923	+3709	-22700	+33366
Diversions			14	3	123	221	434	455	642	752	390	306	30	0	3370
At Hipon Bridge	15.7	159	47530	28220	35620	13140	37400	03930	8670	7980	7140	8320	9770	275700	543420
Unmeasured Accretions			-439	-209	+689	+2356	-831	+3033	+2818	+3115	+2630	+2049	+971	+7700	+23882
Diversions			1	1	2459	3326	4979	7033	6958	7416	4752	2792	381	0	40098
Near Mouth	1.9	160	47090	28010	33850	12170	31590	59930	4530	3679	5018	7577	10360	283400	527204
Melones Power House to Mouth															
Total Unmeasured Accretions			+23201	+4570	+11821	+11967	-3796	+12436	+9030	+9544	+9775	+9620	+6376	+32805	+137349
Total Diversions			12251	10090	24471	68057	85614	101606	79100	71715	22107	10663	3706	3705	493085
MORMON SLOUGH															
At Bellota	0.05	114	47290	6563	571	373	2428	3790	2900	448	0	0	0	NR	
Unmeasured Accretions			-280	-2421	-302	-220	-1538	-1917	-1262	+214	+10	0	0		
Diversions			0	0	48	109	687	1478	1483	662	10	0	0	0	4477
Stockton Diverting Canal at Stockton	17.6	115	47010	4142	221	44	203	395	155	0	0	0	0	115000	167170
CALAVERAS RIVER															
At Jenny Lind	36.9	111	37650	5230	400	2200	6720	10070	10900	3200	0	0	39	131800	208209
Unmeasured Accretions			+9796	+1341	+222	-269	-49	+983	-54	+87	+54	+12	-38		
Mormon Slough at Bellota		114	47290	6563	571	373	2428	3790	2900	448	0	0	0	NR	
Diversions			0	0	51	182	556	1203	1282	871	54	12	1	0	4212
At Bellota	25.25	112	156	8	0	1376	3687	6060	6664	1968	0	0	0	NR	
Unmeasured Accretions			+83	-8	+2	-954	-1542	-2271	-2446	-267	+44	0	0		
Diversions			0	0	2	297	1309	3152	3544	1578	44	0	0	0	9926
Near Stockton	8.9	113	239	0	0	125	836	637	674	123	0	0	0	5783	8417
Jenny Lind to Stockton															
Total Unmeasured Accretions			+9879	+1333	+224	-1223	-1591	-1288	-2500	-180	+98	+12	-38		
Total Diversions			0	0	53	479	1805	4355	4826	2449	98	12	1	0	14138
MOKELUMNE RIVER															
At Lancha Plana		107	36030	32660	14680	14660	19050	19110	22870	22640	22730	23640	20200	153100	401370
Near Clements	39.35	108	41890	34130	15870	14470	22180	23910	23340	22890	22690	22820	20450	160300	424940
Unmeasured Accretions			-2980	-2440	-4062	-2464	-5741	-8004	-2364	-2975	-3164	-2991	-506	-34000	-71691
Diversions			0	0	2218	9036	13219	15099	19926	18855	13706	10079	3584	0	105722
At Woodbridge	19.2	109	38910	31690	9590	2970	3220	807	1050	1060	5820	9750	16360	126300	247527
COSUMNES RIVER															
At Michigan Bar	34.3	104	39090	20930	23090	28670	32150	8970	1870	367	324	571	2240	196100	354372
Unmeasured Accretions			+23020	+4200	+2554	+1221	-351	-287	+254	+190	+106	-235	-1169	+56907	+86410
Diversions			0	0	54	361	289	1603	2034	557	430	336	210	7	5881
At McConnell	10.7	105	62110	25130	25590	29530	31510	7080	90	0	0	0	861	253000	434901

(a) Includes diversions from Dry Creek below Modesto (Clauss Road Bridge).

TABLE 6

SUMMARY OF MONTHLY STREAM FLOW, DIVERSIONS AND ACCRETIONS
TULE RIVER AND TULARE LAKE BASIN - 1955

Item	Mileage	Record in Table No.	Quantities in Acre-Feet											
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total
TULE RIVER															
Near Porterville	-1.0	163	954	9870	6820	4490	10650	4040	336	24	0	68	1220	4074	46666
Unmeasured Accretions			+2009	+3701	+3028	+1476	+2206	+660	+64	-23	-6	-68	+200	+1554	+28861
Diversions			535	711	528	756	1166	1210	238	0	0	0	150	294	5592
At Worth Bridge	2.2	164	8010	12200	9320	7210	11690	3510	222	1	0	0	1330	56000	109753
Friant-Kern Canal to Tule River	11.3	167	0	0	16457	5903	8549	11420	24810	17306	7315	0	0	1500	96260
Friant-Kern Canal to Porter Slough		168	0	157	0	0	0	352	0	0	0	0	0	0	515
Unmeasured Accretions			-5330	-8774	-20232	-5199	-9787	-15777	-24955	-17307	-7315	0	-862	-33731	-153256
Diversions			2680	3806	5545	3914	10452	2153	77	0	0	0	408	2259	31354
At Turnbull Station	37.0	165	0	80	0	0	0	0	0	0	0	0	0	21510	21590
INFLOW TO TULARE LAKE BASIN															
Kings River (S.F.) below Empire Weir #2		169	0	0	0	0	0	0	0	541	1400	0	0	0	1941
Cross Creek below Lakeland Canal #2		170	0	0	0	0	0	0	0	0	0	0	0	8777	8777
Tule River at Turnbull Station		165	0	80	0	0	0	0	0	0	0	0	0	21510	21590
Buena Vista Slough near Lost Hills		172	0	0	0										
Goose Lake Canal near Lost Hills		171	0	0	0										
Total Measured Inflow to Tulare Lake Bed			0	80	0	0	0	0	0	541	1400	0	0	30287	32308

a Not included in computations of unmeasured accretions.

TABLE 7

SUMMARY OF MONTHLY WATER SUPPLY AND UTILIZATION
SACRAMENTO-SAN JOAQUIN DELTA - 1955

Item	Record in Table No.	Quantities in Acre-Feet												
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total
WATER SUPPLY														
Measured Inflow														
Sacramento River at Sacramento	31	1400000	839200	839600	819900	1328000	725200	552800	554900	585800	488600	598700	2434000	11167900
Sacramento Weir	87	0	0	0	0	0	0	0	0	0	0	0	589500	589500
Yolo By.-Pass near Woodland	101	11980	4880	2790	1980	2030	1360	708	1170	4350	720	455	3000000	3033023
Putah Creek near Davis	103	13970	7540	7940	17320	5190	4	0	0	0	0	0	301000	352964
Cosumnes River at McConnell	105	52110	25130	25590	29530	31510	7050	90	0	0	0	861	253000	434901
Dry Creek near Galt	106	27700	7140	4640	3690	2490	18	0	5	0	0	1	87040	132724
Mokelumne River at Woodbridge	109	38910	31090	9590	2970	3220	807	1050	1080	5820	2750	16300	126300	247527
Bear Creek near Lockeford	110	4980	509	151	56	8	12	4	0	0	0	0	7790	13510
Calaveras River near Stockton	113	239	0	0	125	636	637	674	123	0	0	0	5783	8417
Stockton Diverting Canal at Stockton	115	47010	4142	221	44	203	395	155	0	0	0	0	115000	167170
Duck Creek near Stockton	117	2213	4	2	36	18	15	27	66	77	9	2	2188	4657
French Camp Slough near French Camp	122	26880	1740	1537	1388	651	294	45	37	0	196	297	29400	62465
San Joaquin River near Vernalis	134	182300	130100	55480	54550	10740	9000	25600	20470	30270	44150	43710	670600	1500490
Total Measured Inflow		1818292	1065075	986041	931589	1445470	824422	681153	563651	632317	540465	680586	7624801	17715248
Precipitation (a)		19400	50500	28060	103900	34300	0	0	0	10110	5018	55050	468500	419528
WATER UTILIZATION														
Consumptive Use in Delta Service Area	221	9227	4963	10361	153200	217182	244987	322869	335199	247401	141829	71943	51160	1955061
Exportations														
Delta-Mendota Canal	174	563	20267	96472	131247	140073	183642	190859	184255	108401	69004	20846	5469	1160048
Contra Costa Canal	175	1886	2140	2400	4404	4300	6325	7434	6230	5842	3650	3122	2489	49342
City of Vallejo	202	678	600	708	752	1084	1308	1437	1343	1143	915	637	467	10778
Total		3127	23013	99580	136403	151517	191275	199230	191828	115386	73629	24605	11455	1220168
Total Consumptive Use and Exportations		42354	72956	169941	289723	368699	441262	521899	527027	362847	215458	96548	65615	3175229
Delta Uplands Diversions (b)														
Old River	192	115	1	4356	16165	16881	24619	24118	23345	15512	5863	410	3	130908
Tom Paine Slough	192	0	0	1290	2134	2625	4785	1965	4723	3320	1217	405	203	23192
San Joaquin River (Stockton to Vernalis)	192	48	175	5800	12274	10771	11110	17221	14917	10377	76	929	838	84083
French Camp Slough below French Camp	192	0		102	151	599	447	300	482	0	0	11	0	2094
Calaveras River below Stockton	192	0	0	0	0	30	190	159	148	0	47	0	0	769
Mokelumne River below Woodbridge	192	0		153	455	995	1178	2114	1911	1030	260	0		8148
Cosumnes River below McConnell	192		1	0	78	0	846	674	0	389	0		0	2288
Sacramento River below Sacramento	192	0		0	87	140	51	1	410	141	48	3	0	2152
Yolo By-Pass (West Cut)	192	0		0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	192	0	0	2390	1971	1185	1824	1900	1873	1791	800	0	456	10421
Total Delta Uplands Diversions		163	176	14091	42721	42092	46852	48558	47019	32708	8211	1358	1500	284886

(a) Water supply from precipitation has been computed as a weighted mean rainfall and the acreage of the Delta Service area.
(b) Measured diversions to the Delta Uplands supply a portion of the consumptive use in the Delta Service area.

TABLE 8

ANNUAL IRRIGATED ACREAGE 1946-1955

SACRAMENTO-SAN JOAQUIN RIVER SYSTEM SERVICE AREA
AS COVERED BY SACRAMENTO-SAN JOAQUIN WATER SUPERVISION

Stream	Crop	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
					SACRAMENTO RIVER SYSTEM						
Sacramento River Redding to Sacramento	General Rice	117556 124135	121590 123981	149734 124117	143495 137269	152817 108479	162233 140835	142931 139053	134911 164611	139806 184938	165713 136355
Colusa Trough (a) Above Highway 20	General Rice	3030 3694	1035 6574	3249 4745	3140 5561	4933 5150	4053 6640	5144 7279	3519 11006	2807 11791	4936 6968
Back Borrow Pit Highway 20 to Knights Landing	General Rice	2062 7880	2295 9044	2455 7079	1272 9003	3227 5925	2855 6973	2698 5896	2918 6400	2473 5195	3734 4004
Knights Landing Ridge Cut Knights Landing to Yolo By-Pass	General Rice	1170 2795	1975 1087	685 1265	880 1220	996 757	3174 1970	3052 540	1089 1645	2001 2105	4089 2215
Yolo By-Pass Above Highway 40	General Rice	620 200	1241 1895	1023 1000	860 930	650 1168	475 1390	715 0	1418 600	1955 745	1025 872
Lower Butte Creek (a) and Butte Slough	General Rice	8247 1846	4524 1115	4647 660	7136 1875	7195 1537	6984 1702	8656 2850	6944 2563	8173 3883	8366 3177
Sutter By-Pass and (a) Sacramento Slough	General Rice	9380 4925	8841 3211	7918 2635	8303 6184	11651 4479	11118 6114	10060 5575	11078 7446	11418 7993	11583 6183
Feather River Oroville to Mouth	General Rice	27189 51082	28264 49749	29534 43258	31022 51131	34013 41331	31185 56503	30292 57888	29062 64122	28859 64776	34432 47713
Yuba River Smartville to Mouth	General Rice	8872 1956	8282 3630	8716 3115	8838 3300	10005 2641	9635 3415	9803 3603	9116 5304	8637 6080	9102 4692
Bear River Wheatland to Mouth	General Rice	NOT COVERED PRIOR TO 1949			974 0	705 0	725 0	50 0	50 0	161 0	290 0
American River Fair Oaks to Mouth	General Rice	2893 0	3670 0	3628 0	3865 0	4000 0	4834 0	4556 0	4572 0	4632 0	4444 0
					SAN JOAQUIN RIVER SYSTEM						
San Joaquin River (b) Friant to Fremont Ford	General Rice	265888 9727	296245 10563	285884 8670	288751 14638	295874 11705	240107 9493	280397 17031	264929 21949	196302 24067	232116 20582
San Joaquin River Fremont Ford to Vernalis	General Rice	43094 1396	43076 1355	46385 535	45781 625	48114 390	48745 730	47394 623	51635 1501	49994 2479	50845 722
Fresno Slough and James By-Pass	General Rice	19145 1868	17421 2698	19706 1579	22671 4081	19184 2815	23537 1700	24076 2996	23541 7609	26764 9545	23639 5131
Merced River (c) Snelling to Mouth	General Rice	4484 0	5912 0	6494 0	7941 0	7912 0	8088 0	7465 0	7431 0	8394 0	8580 0
Tuolumne River (c) La Grange to Mouth	General Rice	3564 0	3761 0	3745 0	4406 0	4690 0	4497 0	4788 0	5283 120	5758 140	6289 0
Dry Creek Waterford to Mouth	General Rice	NOT COVERED PRIOR TO 1949			421 0	435 0	429 0	467 0	481 0	483 0	471 0
Stanislaus River (c) Melones to Mouth	General Rice	6343 0	6598 0	7916 0	8548 0	8445 0	8336 0	7769 0	8904 0	9289 0	10040 0
					DELTA UPLANDS AND TRIBUTARIES						
San Joaquin River - Delta Uplands Vernalis to Stockton	General Rice	24505 0	25122 0	25551 0	26946 0	26604 0	26609 0	24752 0	27272 0	27358 0	27629 0
Old San Joaquin River (d) Delta Uplands	General Rice	34263 0	37859 0	40301 0	42187 0	40234 0	40110 0	39151 0	41265 0	40739 0	41517 0
Tom Paine Slough Delta Uplands	General Rice	5733 317	5278 546	5077 468	5207 383	5221 364	4745 411	5213 0	5387 0	5467 0	5518 0
Cosumnes River Michigan Bar to Mouth	General Rice	NOT COVERED PRIOR TO 1949			1791 0	1608 0	1711 0	2110 0	3074 190	3767 190	3491 266
Mokelumne River Clements to Delta	General Rice	NOT COVERED PRIOR TO 1949			344 0	331 0	18718 1645	18971 1585	20197 1937	20509 2592	22818 291
Calaveras River Jenny Lind to Delta	General Rice	NOT COVERED PRIOR TO 1949			3571 0	4420 0	5300 0	6158 80	7664 415	9025 471	10184 258
					TOTAL ABOVE DELTA						
Sacramento River System	General Rice	181019 198513	181717 200286	211589 187874	209785 216473	230192 171467	237271 225542	217957 222684	204677 263697	210922 287506	247714 212179
San Joaquin River System	General Rice	342518 12991	373013 14616	370130 10784	378519 19344	384654 14910	333739 11923	372356 20650	362204 31179	296984 36231	331980 26435
Delta Uplands and Tributaries	General Rice	64501 317	68259 546	70929 468	80046 383	78418 364	97193 2055	96355 1665	104859 2542	106965 3253	111157 815
Grand Totals	General Rice	588038 211821	622989 215448	652648 199126	668350 236200	693264 186741	668203 239520	686668 244999	671740 297418	614871 326990	690851 239429

(a) Figures for General Crops include acreage flooded for gun clubs.
(b) Figures exclude acreages irrigated from Madera and Friant-Kern Canals.
(c) Figures exclude acreage in Merced, Turlock, Modesto, Waterford, Oakdale, and South San Joaquin Irrigation Districts.
(d) Figures exclude acreage irrigated from Delta-Mendota and Contra Costa Canals.

TABLE 9

RELATION OF GAGE HEIGHT TO STREAM FLOW - 1955 SEASON
SACRAMENTO-SAN JOAQUIN VALLEY STREAM GAGING STATIONS

STATION	Gage Height, U.S.E.D. elevation, for rated flows of:								
	4000 cfs	5000 cfs	6000 cfs	7000 cfs	8000 cfs	9000 cfs	10000 cfs	12000 cfs	14000 cfs
Sacramento River	Flows under 30000 cfs are affected by tidal action and are rated by slope-velocity methods not applicable to this table.								
at Sacramento			11.4	12.0	12.7	13.3	13.8	14.9	15.9
at Verona	25.1	26.6	28.0	29.4	30.7	32.0	33.2	35.8	38.0
at Wilkins Slough	39.3	40.3	41.3	42.3	43.3	44.3	45.2	47.0	48.8
at Colusa	70.0	70.5	71.0	71.5	71.9	72.3	72.7	73.5	74.3
at Butte City	127.0	127.5	127.9	128.3	128.7	129.1	129.4	130.0	130.6
at Hamilton City	253.5	254.0	254.4	254.8	255.2	255.5	255.9	256.6	257.2
near Red Bluff (a)									
	200 cfs	500 cfs	1000 cfs	2000 cfs	3000 cfs	4000 cfs	5000 cfs	6000 cfs	7000 cfs
Feather River									
near Oroville (a)			186.9	189.2	191.0	192.7	194.3	195.8	197.2
at Nicolaus			21.8	22.9	23.9	24.8	25.6	26.2	26.9
American River									
at Fair Oaks (a)	66.7	67.2	67.8	68.7	69.5	70.1	70.7	71.1	71.5
San Joaquin River									
near Vernalis	4.9	5.6	6.6	7.9	9.1	10.1	11.1	12.0	12.9
at Hetch Hetchy Crossing		18.8	20.0	21.6	22.9				
near Grayson	26.4	27.6	29.2	31.6	33.6	35.4			
near Newman	52.7	53.7	54.9	56.7	58.3	59.6	60.7	61.7	62.6
at Fremont Ford	59.3	60.9	62.6	65.2	67.2	68.8			
Merced River									
at Cressey Bridge (b)	2.0	3.4	5.0	7.3	9.2	10.8	12.3	13.6	14.8
Tuolumne River									
at Modesto (a)	36.1	37.3	39.0	41.5	43.5				
Stanislaus River									
at Ripon (a)	37.9	39.6	41.7	45.1	48.1	50.7	52.8	54.2	55.0

(a) U.S.G.S. datum. (b) Assumed datum.

TABLE 10

FLOW OF SACRAMENTO RIVER AT DELTA (a) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	634	992	550	1130	1650	743	300	194	162	178	189	435
2	602	872	555	1030	1740	701	297	189	162	178	194	409
3	570	800	560	937	1780	684	308	187	162	176	194	374
4	550	731	545	866	1700	695	322	187	160	178	194	347
5	540	695	521	807	1870	690	300	185	158	178	198	370
6	516	656	512	781	2280	651	290	180	158	178	198	565
7	502	640	526	788	2460	607	280	180	156	178	194	502
8	497	634	560	826	2410	575	277	178	156	178	189	512
9	516	646	596	892	2200	540	277	178	160	176	187	814
10	493	624	640	898	2080	512	294	176	160	201	187	590
11	474	618	656	852	2060	512	274	174	160	209	187	550
12	470	618	695	814	1990	479	260	172	158	198	189	590
13	466	634	707	820	1780	461	248	169	158	194	212	585
14	452	662	673	894	1510	470	242	172	246	191	209	560
15	474	678	629	749	1350	461	235	172	220	189	198	535
16	461	713	607	737	1250	435	232	172	204	187	223	624
17	466	807	596	737	1260	418	232	172	198	185	220	748
18	507	755	585	701	1400	405	232	172	194	185	274	5390
19	512	713	590	743	1600	385	229	171	189	187	1250	11800
20	474	678	575	1390	1800	366	223	167	187	189	2490	9800
21	470	640	570	3130	1720	355	220	169	183	187	1270	17000
22	488	624	565	2750	1430	351	218	167	180	187	612	26700
23	540	596	570	2060	1260	347	215	165	180	187	535	15400
24	585	580	585	1840	1170	344	209	163	180	185	479	7160
25	590	570	656	2030	1060	344	206	163	180	185	448	6540
26	596	624	713	2340	992	332	206	165	178	191	418	7720
27	618	602	768	1880	937	322	212	163	180	189	448	5310
28	634	550	950	1690	892	325	209	163	180	189	479	3690
29	651		2070	1600	898	325	204	163	180	187	401	2910
30	852	—	1460	1530	885	311	201	162	180	187	426	2400
31	964	—	1190	—	814	—	196	162	—	187	—	2080
Mean	554	677	709	1275	1556	472	247	173	177	186	432	4310
Ac-Ft	34040	37590	43590	75850	95660	28060	15170	10620	10540	11450	25690	265000

Maximum Discharge	Calendar year 37,000 c.f.s. December 22, 1955 of record 37,000 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year 653260 Water Year 497770

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located 6.0 miles southeast of Delta, California and about three miles upstream from Shasta Lake. Period of record 1944 to date. Records for 1955 computed by U. S. Geological Survey.
(a) Above Shasta Lake.

TABLE 11

FLOW OF PIT RIVER NEAR MONTGOMERY CREEK - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2670	3780	3290	3920	4260	3700	2320	2570	2690	1840	2390	2810
2	2300	3340	3280	4360	4230	3400	1340	2890	2780	2110	2600	2990
3	3010	3230	3250	2540	4930	3100	1000	2860	1790	2260	2530	2770
4	3440	3190	3470	2740	5030	1690	1270	2780	704	2310	2590	2590
5	3090	2020	2330	3500	4840	1130	2880	2630	854	2370	2570	2760
6	2530	1500	1310	3630	4660	3020	3080	861	2760	2720	2540	2970
7	3120	2540	3120	3780	4680	3270	2990	668	2760	1420	2520	2830
8	1670	2710	3470	3870	3560	2910	3260	2530	2870	768	2460	2990
9	1800	2860	3390	2950	4260	2670	960	2640	2940	640	2560	3600
10	2870	2910	3490	1330	3900	2810	868	2640	1090	2570	2580	3000
11	3010	2760	3950	3090	4240	1180	2770	2550	859	2460	2530	2810
12	3050	2980	3660	3650	4500	1000	2620	2630	2290	2630	2580	3110
13	2980	2860	2630	3640	4260	2710	2960	768	2200	2580	2560	2440
14	2900	2340	3320	3220	4000	2800	2960	674	2580	1870	2090	2830
15	1800	2760	4180	3190	2680	2590	3090	2440	2440	1270	2040	2890
16	1340	2950	4090	3360	3970	2840	1230	2620	2650	2650	2010	3330
17	2850	2910	4160	3640	3310	2940	743	2560	2350	2440	1960	4000
18	3790	3390	4080	3950	3730	1560	2480	2570	1510	2590	2190	6350
19	3780	3910	3580	3760	3730	1160	2960	2870	2570	2640	2300	12000
20	3410	3690	2410	5030	4020	3020	2370	1420	2830	2530	4640	14500
21	2760	3420	2620	5810	2590	3470	2660	730	3640	2670	3960	19900
22	1120	3260	3160	5880	2620	3010	2640	2530	3750	2600	2840	28600
23	882	3360	3360	4890	3250	3060	1550	2770	3720	2400	2960	32000
24	3120	3530	2090	3800	3210	2800	719	2650	2830	2580	2660	23600
25	3240	3350	3320	4780	3370	1210	2530	2350	816	2500	2930	21700
26	3290	2440	2960	5400	3510	795	2900	1930	2990	2620	2590	21000
27	3400	3580	1490	5120	3910	2510	2500	758	2460	2640	2800	18900
28	3470	3090	4130	4930	1620	3100	2800	656	2580	1770	2740	15100
29	2550		4610	5120	1100	3120	2680	2810	2180	1050	2680	12100
30	1230	—	4470	5030	1250	3060	709	2870	2400	1160	2730	9410
31	3130	—	4360	—	3500	—	708	2710	—	2960	—	8550
Mean	2697	3041	3343	3997	3636	2524	2147	2159	2363	2181	2638	9498
Ac-Ft	165800	168900	205500	237800	223600	150200	132000	132800	140600	134100	157000	584000

Maximum Discharge	Calendar year 37,100 c.f.s. December 23,1955 of record 37,100 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calender Year 2432300 Water Year 2062900

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located about three miles up-stream from Shasta Lake. Period of record 1944 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 12

FLOW OF MCCLOUD RIVER ABOVE SHASTA LAKE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1280	1480	1200	1710	2100	1420	1060	952	910	904	892	1020
2	1270	1420	1200	1640	2130	1390	1060	958	916	904	892	1010
3	1240	1360	1200	1560	2200	1380	1070	952	910	904	892	982
4	1220	1320	1190	1500	2250	1370	1060	946	910	904	892	958
5	1220	1280	1180	1460	2240	1360	1050	940	910	904	898	988
6	1200	1260	1170	1420	2350	1360	1040	940	910	898	892	1070
7	1200	1230	1180	1400	2460	1340	1030	946	916	892	892	1040
8	1200	1220	1200	1390	2450	1320	1020	940	916	892	886	1080
9	1210	1220	1230	1390	2360	1290	1020	940	916	892	880	1270
10	1200	1210	1290	1390	2260	1270	1020	940	916	910	880	1160
11	1180	1210	1320	1380	2220	1240	1010	940	916	910	880	1120
12	1180	1210	1380	1360	2190	1240	1010	934	910	910	886	1130
13	1170	1210	1400	1360	2120	1220	1000	928	916	904	910	1130
14	1160	1220	1360	1360	1980	1220	994	934	964	904	892	1120
15	1180	1230	1320	1340	1890	1210	988	928	952	904	880	1100
16	1180	1260	1290	1320	1800	1190	988	928	934	904	910	1180
17	1170	1310	1270	1400	1750	1180	982	928	940	898	898	1270
18	1200	1300	1250	1370	1730	1170	982	934	934	898	934	3900
19	1200	1280	1240	1430	1750	1180	982	928	928	898	1300	12200
20	1180	1260	1230	1950	1790	1160	976	922	922	904	2380	26700
21	1170	1240	1220	3100	1820	1150	970	922	916	898	1740	36100
22	1170	1220	1210	3200	1790	1140	970	922	916	898	1190	33900
23	1180	1210	1210	2760	1730	1130	964	922	910	892	1110	21000
24	1150	1200	1220	2490	1690	1100	964	922	910	898	1060	10400
25	1200	1200	1240	2560	1630	1090	976	916	904	898	1030	7090
26	1200	1270	1260	2730	1590	1080	976	922	904	910	1000	8180
27	1210	1240	1300	2460	1560	1080	958	916	910	898	994	7220
28	1220	1210	1490	2270	1530	1070	958	910	910	898	1000	5260
29	1230		2180	2180	1520	1080	958	916	910	892	1000	4260
30	1290	—	2050	2110	1500	1070	958	916	904	892	988	3710
31	1380	—	1800	—	1460	—	952	910	—	886	—	3340
Mean	1209	1260	1332	1833	1931	1217	998	931	918	900	1029	6513
Ac-Ft	74340	69980	81880	109100	118700	72400	61380	57230	54620	55330	61250	400400

Maximum Discharge	Calendar year 45,200 c.f.s. December 22, 1955 of record 45,200 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year 1216610 Water Year 945310

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located about four miles upstream from Shasta Lake. Period of record 1945 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 13

FLOW OF SQUAW CREEK ABOVE SHASTA LAKE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	105	371	119	129	502	94	48	25	16	16	16	76
2	100	298	122	121	474	92	48	25	16	16	16	71
3	94	240	126	115	471	88	49	25	16	16	16	64
4	90	202	133	109	447	85	50	24	15	16	16	56
5	85	177	130	104	418	82	46	23	15	15	17	60
6	81	160	124	100	409	78	45	22	14	15	16	158
7	79	148	130	97	394	77	44	22	14	15	17	133
8	77	138	143	95	360	75	43	22	14	15	16	126
9	79	136	162	93	326	73	42	22	15	15	16	155
10	76	130	177	91	298	71	42	21	14	17	16	186
11	73	126	180	86	275	70	41	21	14	19	16	140
12	70	123	162	86	253	70	39	20	14	18	16	129
13	70	124	17[illegible]	87	234	68	39	20	14	16	20	116
14	68	124	166	85	216	68	37	20	21	16	23	103
15	71	124	152	81	200	68	36	19	25	16	21	91
16	71	131	141	80	187	65	35	19	20	15	24	129
17	70	144	134	134	176	63	35	18	20	15	25	204
18	78	134	129	115	168	61	34	18	19	15	43	1720
19	85	126	123	156	158	59	34	18	18	16	139	5160
20	82	118	116	672	151	58	33	18	18	16	680	5470
21	79	112	111	1550	144	57	32	18	18	16	255	9140
22	79	106	106	1570	137	56	31	18	17	16	95	11200
23	88	100	103	1060	133	55	30	18	16	16	82	6870
24	105	97	101	765	127	55	30	17	16	16	80	2400
25	112	95	100	716	122	54	28	18	16	16	78	1490
26	130	121	99	758	117	52	28	18	16	19	68	1670
27	148	145	100	663	111	51	28	17	16	18	67	1550
28	156	127	122	579	109	51	28	17	16	16	70	1150
29	156		162	544	104	51	27	17	16	16	68	895
30	182	—	148	520	100	49	26	17	16	16	61	742
31	247	—	134	—	97	—	26	16	—	16	—	620
Mean	99.5	149	134	379	239	66.5	36.6	19.8	16.5	16.1	70.0	1686
Ac-Ft	6120	8280	8240	22540	14710	3960	2250	1220	982	990	4170	103700

Maximum Discharge	Calendar year 17,800 c.f.s. December 21, 1955 of record 17,800 c.f.s. December 21, 1955	Total Runoff in Acre-Feet	Calendar Year 177162 Water Year 80152

U. S. Geological Survey and U.S. Bureau of Reclamation cooperative station located about two miles upstream from Shasta Lake. Period of record 1944 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 14

INFLOW TO SHASTA LAKE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5310	8180	5820	7460	10190	5430	3370	3440	3660	3230	3530	5040
2	4740	7060	5690	7670	10530	6120	3070	4240	3750	3050	3700	4610
3	5570	6590	5970	5610	11150	5660	2720	4230	2990	3370	3740	4510
4	5630	6480	5770	5410	11190	4400	2650	3910	1810	3400	3680	4060
5	5480	5130	4710	6420	10540	4080	4340	3750	1720	3570	3790	4230
6	5350	4310	3670	6230	11210	5290	4530	2040	3150	3100	3730	7660
7	5100	5460	5570	6650	11130	5590	4480	1470	3620	2720	3450	8860
8	3820	5190	5610	6600	10110	5350	4720	3750	3070	1900	3770	7720
9	4500	5640	6210	5790	10470	4390	2650	3710	3030	2600	3500	8350
10	4980	5430	6360	4100	9730	4300	2330	3360	2500	4010	3650	7220
11	5110	5420	6420	5580	9780	3550	4240	3550	1560	3560	3650	5520
12	5020	5420	6510	6350	9770	3330	3330	3770	3280	3650	3600	6300
13	5300	5480	5340	6350	9210	4750	4620	2010	3340	4000	4740	5420
14	4770	5380	6220	5760	8430	4600	4570	1840	4150	3200	3490	5170
15	4630	5580	6710	5780	6760	4240	4520	3330	3620	2430	2870	5410
16	3610	5740	6520	5780	7960	4890	2690	3650	3610	3730	4150	7050
17	6080	5730	6570	7030	7220	4300	2230	3520	3420	3470	3500	9200
18	7620	6080	6220	6750	7730	3530	3400	3600	2720	3400	4830	11240
19	7740	6450	6020	5790	7880	2770	4410	3610	3610	3640	8000	12540
20	6450	6210	5960	15910	8450	4870	3090	2430	3160	3760	17400	12250
21	5530	5830	4910	25410	7020	5310	3410	2050	1740	3760	200	110820
22	3730	5730	5520	21410	6480	4420	3920	2750	4900	3670	5290	140880
23	3300	5800	5530	15430	6900	4900	3020	4000	4760	3430	6640	100560
24	6090	5770	5240	a12200	6600	4290	1890	3750	4240	3460	5170	81500
25	5600	5660	5770	15460	6840	2900	3840	3300	b1800	3980	5240	45370
26	6620	7410	5400	15130	6470	2400	3930	2080	4230	3670	4550	47710
27	6440	6430	4310	13310	7010	3730	4080	1730	337	3610	4410	30790
28	6750	5620	7460	12470	6950	4520	4040	1540	3990	3340	4760	20780
29	7110		10470	11750	3990	4530	3880	3670	3360	2720	4470	24050
30	1720	—	8660	11380	3910	4510	2760	3730	3460	2180	4720	19460
31	7110	—	7830	—	5950	—	2110	3420	—	3440	—	17990
Mean	5512	5[illegible]24	6611	9668	8245	4542	3561	3221	3474	3345	4932	36407
Ac-Pt	339040	32876[illegible]	37581[illegible]	574290	506[illegible]	270260	219[illegible]	198210	2[illegible]6[illegible]0	2[illegible]4[illegible]0	293[illegible]	1800[illegible]

Maximum Discharge	Calendar year daily mean 140,[illegible] c.f.s. December 22, 1955 of record daily mean 140,[illegible] c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year 5387[illegible] Water Year 4113[illegible]

These quantities are [illegible]mated monthly recorded flow to Shasta Lake as computed by the U. S. Bureau of Reclamation, taking into account change in storage, release, spill, precipitation, and evaporation and are representative of the natural flow passing the dam site if the dam had not been constructed. Drainage area is 6665 square miles. Period of record 1944 to date.

(a) 23-hour day

(b) 25-hour day

TABLE 15

DAILY CONTENT OF SHASTA LAKE IN ACRE-FEET - 1955

Date	Storage at end of day in thousands of acre-feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3192.8	3194.2	3255.7	3422.5	3689.2	3806.6	3546.1	3078.2	2659.8	2450.5	2329.2	2361.0
2	3190.2	3200.4	3259.5	3429.7	3699.7	3805.9	3529.9	3063.7	2649.6	2445.8	2326.6	2364.3
3	3189.0	3206.3	3265.5	3433.4	3711.2	3802.1	3512.6	3049.5	2638.3	2441.1	2323.6	2366.8
4	3187.9	3210.4	3271.0	3436.1	3722.4	3796.6	3495.7	3034.6	2624.9	2436.8	2321.2	2368.9
5	3186.7	3213.4	3273.5	3440.6	3732.9	3789.1	3481.7	3019.8	2611.3	2433.0	2318.2	2376.8
6	3185.3	3214.1	3275.1	3443.8	3744.0	3784.1	3468.2	3001.6	2602.4	2429.3	2316.3	2386.3
7	3182.7	3216.8	3279.9	3447.0	3755.6	3779.9	3454.7	2983.1	2592.8	2423.1	2313.1	2391.1
8	3178.0	3220.1	3285.5	3449.5	3766.1	3775.1	3441.6	2967.8	2584.8	2414.1	2310.0	2400.0
9	3175.1	3222.7	3291.7	3450.3	3774.8	3769.3	3424.5	2953.0	2577.7	2407.3	2307.4	2410.6
10	3173.0	3225.8	3298.3	3448.5	3783.1	3763.5	3406.9	2938.4	2567.1	2403.9	2304.4	2416.8
11	3171.4	3228.0	3305.5	3447.0	3792.6	3754.8	3392.9	2924.2	2555.3	2399.8	2301.3	2421.9
12	3169.0	3228.7	3312.2	3446.0	3801.1	3745.0	3378.7	2910.2	2546.6	2396.5	2297.9	2427.4
13	3167.4	3229.4	3317.1	3446.3	3807.7	3738.2	3365.0	2892.9	2538.1	2394.0	2297.8	2432.6
14	3164.5	3229.9	3323.1	3444.5	3811.6	3731.4	3351.8	2875.1	2532.2	2389.8	2294.0	2436.6
15	3162.0	3230.1	3330.4	3441.6	3813.0	3724.0	3338.2	2860.4	2525.0	2384.5	2289.8	2441.5
16	3157.0	3231.3	3337.7	3438.8	3815.1	3716.7	3320.7	2846.6	2519.0	2381.8	2289.8	2449.0
17	3157.0	3233.7	3344.3	3436.1	3815.4	3709.3	3302.6	2833.3	2511.9	2378.3	2288.3	2461.6
18	3160.8	3234.2	3351.1	3438.1	3816.7	3699.2	3286.9	2820.7	2504.3	2375.8	2289.1	2525.4
19	3165.5	3236.5	3356.7	3443.8	3817.7	3686.1	3273.2	2809.0	2497.7	2373.1	2297.4	2668.5
20	3167.1	3239.4	3360.3	3465.7	3820.1	3677.5	3258.8	2795.6	2492.9	2370.4	2326.7	2845.3
21	3165.7	3240.6	3364.2	3509.5	3819.6	3668.8	3243.7	2782.2	2490.9	2367.7	2336.8	3077.0
22	3161.5	3241.6	3367.9	3543.6	3817.7	3660.7	3225.4	2770.2	2489.0	2364.8	2339.9	3342.6
23	3157.5	3242.3	3371.3	3566.5	3817.2	3651.6	3213.9	2760.6	2487.0	2361.4	2344.7	3512.0
24	3158.0	3243.2	3373.8	3581.7	3818.3	3640.2	3196.1	2750.5	2483.4	2359.2	2347.7	3557.8
25	3161.7	3243.5	3376.7	3602.2	3819.1	3625.6	3182.0	2739.6	2475.8	2356.8	2350.2	3592.0
26	3166.4	3248.3	3379.2	3622.7	3819.6	3609.9	3168.3	2728.2	2472.5	2353.7	2351.6	3617.1
27	3171.4	3250.6	3378.6	3639.0	3820.9	3597.1	3154.6	2718.4	2467.7	2350.8	2352.7	3603.5
28	3176.1	3252.8	3386.3	3653.2	3818.5	3585.6	3141.6	2700.2	2463.8	2346.8	2354.3	3560.8
29	3179.6		3399.6	3666.6	3813.5	3574.4	3128.0	2689.7	2456.6	2340.7	2355.8	3525.4
30	3180.8	—	3408.7	3678.3	3808.7	3560.9	3113.6	2680.0	2455.3	2334.9	2357.1	3472.4
31	3186.7	—	3416.1	—	3807.4	—	3093.2	2670.2	—	2332.3	—	3416.1
Monthly Change	-7.5	+66.1	+163.3	+262.7	+128.6	-246.5	-467.7	-423.0	-214.9	-123.0	+24.8	+1059.0

Annual gain or loss in storage: Calendar Year +221,900; Water Year -601,500 Acre-Feet
Differences in storage 1954 to 1955: Maximums -643,800; Minimums -643,000 Acre-Feet

Period of record 1944 to date. Records for 1955 computed by U. S. Bureau of Reclamation.

TABLE 16

FLOW OF SACRAMENTO RIVER AT KESWICK - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6350	4310	5140	4190	5370	6840	11200	11000	8790	5640	5210	3580
2	6380	4310	4080	4180	5570	6850	11200	11300	8790	5640	4770	3200
3	6350	4040	3150	4200	5500	7100	11300	11400	8660	5640	5110	3150
4	6380	3970	3130	4220	5490	7320	11200	11400	8580	5620	5140	3140
5	6360	4000	3120	4200	5430	7690	11300	11400	8550	5620	5140	3210
6	6340	3990	3090	4380	5490	7720	11200	11400	8580	5780	5120	3290
7	6350	3980	3100	4920	5480	7740	11200	11400	8350	5820	5140	3180
8	6340	3970	3090	5380	5510	7720	11200	11400	7930	5840	5070	3170
9	6320	3970	3100	5390	5490	7740	11200	11300	7740	5780	4970	3150
10	6320	3960	3120	5390	5430	7750	11200	11300	7710	5820	5190	3140
11	6290	3970	3100	6100	5400	7960	11200	10800	7690	5840	4980	3130
12	6280	5270	3110	6370	5410	8160	11200	10800	7740	5360	4960	3120
13	6330	5300	3100	6710	5650	8160	11200	10800	7500	5240	4940	3110
14	6340	5300	3140	6850	6370	8180	11200	10800	7280	5260	5000	3110
15	6330	5330	3130	7250	6370	8200	11200	10800	7280	5240	4980	3120
16	6360	5320	3140	7320	6850	8350	11200	10500	7010	5240	4270	3110
17	6410	5300	3140	7310	7280	8510	11200	10200	6840	5240	4280	3140
18	6520	5290	3140	7290	7280	8530	11200	9890	6810	5240	4010	3870
19	7420	5310	3130	6840	7270	9250	11200	9700	6850	5240	4070	8360
20	6480	5300	3100	5430	7280	9090	11300	9240	6580	5260	4160	6660
21	6450	5280	3130	5310	7230	9000	11300	8660	6290	5220	4080	9590
22	6420	5300	3350	4390	7290	8900	11000	8710	5770	5240	4110	12200
23	6390	5330	4080	4320	7280	9360	10700	8760	5740	5240	4180	17200
24	6350	5320	4100	4600	6230	9940	10700	8790	5800	5280	4170	29900
25	4330	5340	4110	5750	6160	10200	10800	8770	5710	5240	4130	29600
26	4340	5330	4100	5430	6240	10200	10800	8790	5780	5260	4100	35900
27	4340	5340	4140	5430	6190	10300	10800	8790	5760	5270	4090	48400
28	4350	5300	4090	5420	6330	10200	10800	8820	5760	5260	4150	48300
29	4320		4150	5410	6330	10800	10800	8820	5590	5240	4040	48000
30	4340	—	4190	5410	6330	11300	10800	8800	5570	5210	3690	47200
31	4330	—	4200	—	6600	—	10800	8820	—	5210	—	46900
Mean	5942	4812	3516	5514	6198	8635	11080	10110	7101	5420	4575	14390
Ac-Ft	365400	267200	216200	328100	381100	513800	681500	621500	422500	333300	272200	884900

Maximum Discharge	Calendar year 51,100 c.f.s. December 28, 1955 of record 186,000 c.f.s. February 28, 1940	Total Runoff in Acre-Feet	Calendar Year 5287700 Water Year 4782200

U. S. Geological Survey and Division of Water Resources cooperative station located at Mile 250.5 above Sacramento. These flows include releases from Shasta Reservoir. Drainage area is 6,710 square miles. Period of record 1938 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 17

FLOW OF SACRAMENTO RIVER NEAR REDDING - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6440	4400	4290	3570	4930	6310	11000	10700	8350	5150	4860	3800
2	6440	4360	4110	3550	5130	6310	11000	11000	8350	5110	5040	3300
3	6420	4130	3230	3570	4950	6520	11000	11000	8210	5110	5040	3280
4	6470	4040	3060	3610	5000	6810	11000	11000	8090	5130	5020	3280
5	6440	4090	3060	3610	4950	7200	11000	11000	8090	5130	4970	3610
6	6470	4070	3010	3660	4950	7200	11000	11000	8090	5150	4970	4940
7	6440	4040	3030	4230	4930	7230	11030	11000	7980	5390	5040	3390
8	6420	4020	3030	4750	4950	7230	11030	11000	7520	5440	5110	3470
9	6440	4040	3050	4720	4960	7260	11000	10900	7230	5350	5060	3510
10	6420	4020	3050	4750	4880	7230	11100	10900	7230	5440	5080	3410
11	6360	4020	3050	5300	4860	7430	11100	10400	7230	5400	5080	3380
12	6360	5130	3050	5690	4840	7690	11200	10400	7230	5250	5060	3360
13	6360	5320	3010	5950	4930	7690	11200	10300	7110	4880	5130	3340
14	6390	5350	3050	6130	5840	7660	11200	10300	6860	4840	5130	3340
15	6420	5350	3050	6550	5870	7690	11200	10300	6810	4820	5200	3340
16	6440	5370	3050	6620	6420	7860	11200	10000	6620	4860	4620	3380
17	6470	5350	3030	6650	6860	8090	11200	9720	6360	4860	4570	3550
18	6810	5300	3030	6650	6810	8090	11300	9460	6390	4860	4380	4560
19	8120	5350	3030	6390	6750	8730	11200	9210	6390	4860	4380	5810
20	6700	5350	3000	4970	6730	9670	11200	8800	6180	4880	4930	7430
21	6490	5320	3000	4880	6730	8540	11200	8180	5900	4930	4440	e10200
22	6420	5350	3150	3940	6750	8480	10900	8150	5300	4880	4440	e18000
23	6420	5370	3860	3700	6700	8890	10600	8210	5320	4860	4530	e24000
24	6390	5350	3840	3860	5740	9560	10600	8240	5320	4900	4360	e31000
25	4620	5390	3960	5130	5640	9910	10600	8240	5200	4900	4400	e31000
26	4440	5420	3700	5020	5690	9910	10600	8260	5320	4950	4380	e37500
27	4420	5390	3550	4930	5660	9940	10600	8260	5320	4930	4360	e43600
28	4400	5350	3510	4900	5820	9910	10500	8260	5320	5000	4380	e43100
29	4400		3570	4950	5840	10400	10500	8290	5300	5000	4290	e43700
30	4400	—	3550	4930	5790	11000	10500	8350	5130	5040	3880	e46500
31	4420	—	3550	—	6050	—	10500	8440	—	4970	—	e46200
Mean	6053	4859	3307	4905	5673	8181	10940	9654	6658	5044	4738	15140
Ac-Ft	372200	269800	203300	291900	348800	486800	672800	593600	396200	310100	281900	930800

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	5158200
			Water Year	4605000

Division of Water Resources station located at Mile 240.7 above Sacramento. Station is located below the diversion dam of Anderson-Cottonwood Irrigation District and is also known as Sacramento River above Churn Creek pumps. Period of record 1945 to 1952 and 1954 to date.

e Estimated.

TABLE 18

FLOW OF SACRAMENTO RIVER AT BALLS FERRY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8940	7720	5180	4390	6810	6730	11000	10400	8270	5180	5300	4350
2	7940	6030	4850	4370	7190	6760	11000	10800	8240	5270	5080	4020
3	7460	5440	4120	4300	6910	6940	11000	10700	8190	5230	5110	3810
4	7330	5200	3780	4300	6650	7220	11000	10700	8080	5250	5110	3760
5	7240	5150	3780	4260	6460	7520	11000	10700	8050	5230	5110	7910
6	7160	5130	3720	4260	6410	7530	11000	10700	8080	5250	5110	20700
7	7100	4990	3700	4730	6390	7580	11000	10700	7990	5470	5110	6310
8	7100	4920	3720	5230	6410	7580	11000	10700	7520	5490	5200	5370
9	7410	4850	3740	5270	6310	7580	11000	10700	7160	5470	5180	9480
10	8020	4850	3830	5370	6080	7580	11000	10700	7160	5510	5150	5590
11	7440	4830	3810	5760	6010	7740	11000	10300	7160	5560	5180	4830
12	7300	5640	3830	6260	5960	7990	11000	10200	7220	5640	5150	4500
13	7240	6060	3780	6520	5960	7960	11000	10200	7100	5030	5370	4300
14	7220	6060	3760	6810	6730	7910	11000	10200	6860	4960	5390	4170
15	7440	6060	3740	7190	6680	7990	11000	10100	6830	4920	5420	4100
16	8650	6080	3720	7300	7130	8130	11000	9980	6730	4960	4920	6180
17	8080	6210	3740	9300	7410	8380	11000	9620	6390	4920	4900	12100
18	11700	6080	3680	8470	7460	8330	11100	9390	6410	4940	4800	21100
19	13500	6010	3640	7960	7520	8880	11000	9060	6390	5010	5200	33200
20	10700	5960	3580	7440	7520	8970	11100	8820	6240	5010	13900	26000
21	8970	5930	3580	11200	7460	8760	11100	8130	5910	5030	11800	22700
22	8350	5880	3580	10400	7520	8650	10800	8160	5320	5010	5590	46000
23	8270	5880	4300	7240	7410	8880	10500	8160	5320	5010	5660	40300
24	8050	5910	4320	6340	6600	9590	10500	8160	5370	5010	6360	32300
25	6490	5930	4480	7580	6290	9980	10500	8190	5250	5010	5250	34400
26	5910	6030	4300	7530	6340	9980	10400	8190	5350	5060	4920	30800
27	5740	6290	4210	7270	6240	9980	10400	8190	5320	5080	4730	49500
28	5660	6110	4320	6970	6340	9950	10400	8190	5300	5080	4760	47800
29	5560		4730	7580	6360	10300	10400	8190	5300	5080	4710	46900
30	5710	—	4600	7330	6290	11100	10300	8220	5180	5080	4260	45100
31	6400	—	4370	—	6390	—	10300	8220	—	5060	—	44800
Mean	7746	5758	4016	6664	6686	417	10830	9505	6656	5155	5664	20690
Ac-Pt	476300	320000	246900	396600	411100	500900	666000	584500	396100	317000	337100	1272000

Maximum Discharge	Calendar year 54,600 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year	5924500
			Water Year	5228300

Division of Water Resources station located at Mile 244.5 above Sacramento. Period of record 1945 to 1952 and 1954 to date.

TABLE 19

FLOW OF SACRAMENTO RIVER NEAR RED BLUFF (IRON CANYON) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11400	9630	6170	5150	8460	7540	11400	10800	8900	5660	5370	4760
2	9950	7430	5540	5120	8540	7510	11400	11200	8900	5640	5520	4660
3	8900	6620	5080	5080	8560	7560	11400	11200	8870	5660	5540	4350
4	8540	6270	4520	5060	8180	7940	11400	11300	8620	5660	5570	4250
5	8350	6150	4460	5020	8000	8130	11400	11200	8650	5660	5680	7450
6	8100	6000	4360	4910	7890	8290	11400	11300	8650	5700	5570	34500
7	8000	5860	4350	5230	7940	8290	11300	11300	8620	5820	5570	10400
8	7940	5800	4330	5730	8020	8270	11300	11300	8210	5910	5610	4720
9	8080	5700	4400	5930	7970	8240	11300	11300	7780	5890	5610	11800
10	9600	5660	4600	5960	7700	8270	11300	11200	7750	5980	5570	7970
11	8560	5590	4680	6170	7540	8370	11400	11000	7750	5980	5500	6240
12	8100	6240	4680	6930	7350	8760	11300	10800	7750	6050	5520	5680
13	8050	6770	4620	7060	7240	8700	11300	10800	7730	5500	5730	5370
14	7940	6800	4540	7480	7970	8670	11300	10800	7480	5340	5820	5100
15	8400	6770	4460	7730	7970	8700	11300	10900	7510	5320	5910	4870
16	10200	6850	4420	7940	8210	8730	11300	10800	7670	5320	5860	5820
17	9600	7010	4360	9520	8290	9040	11300	10300	7030	5300	5410	11200
18	14300	7010	4350	9860	8620	8980	11300	10300	7060	5300	5480	27800
19	15300	6930	4290	8980	8590	9350	11200	9780	7010	5320	5860	54600
20	16300	6820	4250	8320	8620	9600	11200	9660	6930	5370	11600	57100
21	11000	6750	4180	11300	8590	9350	11200	8840	6440	5450	20600	29300
22	10000	6720	4210	14000	8590	9230	11200	8810	5890	5390	7290	88500
23	9690	6670	4720	9660	8560	9260	10800	8840	5820	5370	6820	74900
24	9400	6700	4890	8160	7940	10000	10800	8840	5820	5340	8290	54700
25	8100	6700	4930	8650	7270	10400	10800	8840	5730	5390	6240	46000
26	7140	6670	4950	10700	7270	10500	10900	8870	5860	5450	5680	52500
27	6880	7040	4850	9040	7140	10500	10800	8870	4800	5430	5410	63900
28	6700	6980	4980	8510	7160	10500	10800	8870	5800	5450	5340	60800
29	6540		5500	8840	7210	10600	10800	8900	5820	5480	5300	57200
30	6670	—	5590	9230	7160	11400	10800	8870	5700	5500	4890	54900
31	7210	—	5280	—	7140	—	10900	8900	—	5520	—	54000
Mean	9192	6648	4727	7709	7925	9023	11170	10150	7252	5553	6472	29530
Ac-Ft	565200	369200	290700	458700	487300	536900	686900	624200	431500	341500	385100	1816000

Maximum Discharge	Calendar year 109000 c.f.s. December 22, 1955 of record 291000 c.f.s. February 28, 1940	Total Runoff in Acre-Feet	Calendar Year	6993200
			Water Year	5878800

U. S. Geological Survey station located near the Iron Canyon dam site at Mile 198.6 above Sacramento. Drainage area is 9,300 square miles. Period of record 1902 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 20

FLOW OF SACRAMENTO RIVER AT VINA BRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15300	12100	7530	6200	9910	8110	11700	10600	8490	5700	5660	5410
2	13200	10600	6600	6130	9630	8140	11600	10800	8490	5770	5680	5540
3	11000	9180	6490	6020	10300	8090	11700	11000	8490	5770	5680	5110
4	10200	8310	5770	5940	9850	8380	11700	11000	8310	5790	5770	5010
5	9850	7870	5600	5830	9550	8590	11700	10900	8260	5810	5850	5250
6	9660	7580	5500	5730	9630	8880	11700	10900	8230	5770	5850	30200
7	9310	7230	5450	5810	9910	8910	11600	10900	8230	5900	5830	18700
8	9100	6900	5430	6180	10000	8880	11600	10800	8010	5960	5900	8990
9	9310	6850	5600	6510	9910	8860	11600	10800	7650	5980	5920	13200
10	11500	6830	6130	6560	9440	8810	11600	10900	7500	5980	5850	10700
11	10900	6760	6180	6600	9200	8960	11600	10700	7530	6180	5830	7650
12	9770	6900	6110	7210	9040	9130	11600	10400	7480	6150	5810	6760
13	9470	7770	6000	7430	8830	9280	11500	10400	7480	5790	6000	6440
14	9260	7790	5950	7820	9040	9280	11600	10400	7310	5600	6220	6020
15	9200	7770	5730	7940	9100	9230	11500	10300	7330	5530	6240	5810
16	11800	7790	5580	8260	8910	9200	11500	10400	7280	5540	6330	5830
17	11800	8140	5520	8750	9120	9420	11500	9990	7180	5540	6000	9850
18	18200	8260	5310	11200	9520	9440	11400	9820	6900	5560	5900	25700
19	18600	7990	5150	9850	9520	9520	11300	9500	6880	5580	6110	84400
20	22000	7890	5050	9600	9600	9970	11300	9340	6810	5580	7900	97400
21	14100	7770	5050	13200	9740	9740	11200	8780	6560	5620	22600	50100
22	12100	7720	5010	18500	9710	9660	11200	8510	6150	5620	9800	110000
23	11400	7620	5150	12600	9580	9580	10900	8460	5940	5660	7260	122000
24	11000	7580	5500	10200	9420	10200	10800	8430	5900	5700	8990	82900
25	10400	7550	5500	9990	9360	10700	10700	8460	5870	5700	7260	61200
26	8730	7580	5620	12500	9160	10800	10700	8460	5830	5700	6460	68700
27	8360	7820	5520	11000	8040	10800	10700	8460	5850	5750	6070	79400
28	8180	7920	5770	9990	7960	10800	10700	8460	5850	5640	5960	72600
29	7990		6350	9850	8010	11100	10600	8460	5850	5640	5870	66600
30	7900	—	6410	10600	8010	11500	10600	8460	5770	5680	5700	63100
31	8380	—	6380	—	7940	—	10600	8510	—	5660	—	61000
Mean	11240	7731	5784	8300	9192	9468	11290	9786	7114	5739	6877	38760
Ac-Ft	691100	440500	355600	508000	565200	563400	694200	601700	423300	352900	409200	2383000

Maximum Discharge	Calendar year 133,000 c.f.s. December 22, 1955 of record 146,000 December 28, 1951	Total Runoff in Acre-Feet	Calendar Year	8003700
			Water Year	6573800

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located at Mile 166.5 above Sacramento. Period of record 1945 to date. Records for 1955 computed by Division of Water Resources.

TABLE 21

SACRAMENTO RIVER AT HAMILTON CITY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14700	10400	7710	5360	8700	5710	9150	8300	6750	5050	5000	5300
2	13200	9890	6800	5360	8360	5850	9100	8360	6800	5050	5050	5390
3	11100	8500	6570	5270	8870	5780	9210	8580	6880	4980	5050	5070
4	10100	7870	5880	5090	8440	6000	9300	8640	6330	4960	5120	4840
5	9680	7550	5620	4870	8080	6240	9150	8610	6830	4960	5160	4910
6	9410	7370	5480	4610	7980	6600	9040	8610	6850	4960	5160	e27500
7	9100	7180	5340	4440	8190	6600	8980	8730	6980	5090	5120	e23900
8	8950	7080	5320	4650	8240	6500	9010	8730	6880	5200	5160	10100
9	9040	6930	5410	4890	8030	6370	9010	8670	6620	5340	5100	12000
10	11200	6880	5950	4800	7550	6440	8980	8610	6600	5430	5020	11800
11	11000	6830	6120	4840	7240	6600	9010	8710	6600	5570	4910	6300
12	9770	6800	6050	5230	7080	6780	8950	8300	6650	5600	4840	7210
13	9380	7580	5950	5430	6930	6930	8900	8270	6700	5390	5480	6730
14	9210	7790	5760	5710	6960	6930	8950	8300	6700	5020	6070	6370
15	9150	7820	5620	5780	7260	6780	8950	8240	6730	5000	6070	5970
16	11300	7820	5530	6170	7010	6750	8950	8220	6700	4910	6220	5950
17	11800	7950	5410	6550	7240	6930	8950	8060	6670	4890	5780	9160
18	16300	8140	5320	9500	7530	7060	8930	7850	6240	4910	5780	e23700
19	18200	8000	5250	8060	7530	7060	8900	7580	6190	4910	5780	e66500
20	21100	7850	5050	8000	7580	7480	8900	7530	6170	4980	6730	93600
21	14500	7740	5000	10200	7550	7370	8870	6960	5930	5050	*22000	53300
22	12300	7610	4780	16200	7580	7290	8780	6650	5620	5020	11400	82400
23	11500	7550	4550	12000	7580	7180	8640	6570	5230	5050	7580	107000
24	11100	7500	4960	9180	7370	7480	8470	6570	5160	4960	8730	86000
25	10600	7530	4890	8640	6420	8060	8500	6650	5250	4980	7790	60200
26	8870	7580	4890	10700	6090	8270	8530	6620	5140	4980	6650	62100
27	8410	7690	4820	10100	5950	8270	8410	6600	5140	4980	6120	74100
28	8160	7950	4960	8930	5810	8270	8360	6670	5140	5000	5900	66000
29	8000		5530	8560	5850	8270	8360	6730	5090	5050	5850	62000
30	7930	—	6070	9210	5780	8750	8360	6650	5090	4980	5660	58600
31	8220	—	5730	—	5570	—	8360	6650	—	4960	—	56600
Mean	11070	7764	5559	7278	7302	7020	8837	7746	6205	5071	6548	35950
Ac-Ft	680900	431200	341800	433100	449000	417700	543400	476300	369200	311800	389600	2211000

Maximum Discharge	Calendar year 109,000 c.f.s. December 23, 1955 of record *350,000 c.f.s. February 28, 1940	Total Runoff in Acre-Feet	Calendar Year	7055000
			Water Year	5794700

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located at Mile 149.5 above Sacramento.
Period of record 1945 to date. Records for 1955 computed by Division of Water Resources.
e Estimated

TABLE 22

FLOW OF SACRAMENTO RIVER AT ORO FERRY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16400	10700	7910	5470	9260	5980	9210	8580	6800	5130	5180	5960
2	15600	11300	7130	5430	8730	6140	9110	8600	6840	5070	5200	6000
3	12600	9490	6780	5330	9130	6060	9310	8880	6870	5040	5200	5760
4	11400	8660	6220	5250	8880	6160	9360	8880	6890	5040	5250	5490
5	10700	8220	5780	5140	8480	6390	9390	8860	6820	5020	5310	5470
6	10300	8080	5650	4930	8220	6600	9260	8860	6820	5040	5350	21800
7	9950	7800	5510	4740	8340	6690	9160	8960	6910	5040	5330	30400
8	9710	7680	5450	4820	8600	6670	9180	9010	6890	5220	5370	11900
9	9840	7510	5530	5040	8440	6560	9160	8980	6580	5200	5410	12000
10	12500	7440	5940	5070	8010	6580	9160	8930	6470	5290	5290	13800
11	12300	7300	6200	5050	*7460	6560	9180	8980	6450	5490	5240	9410
12	10800	7220	6120	5250	e7280	6890	9180	8710	6470	5530	5200	7890
13	10300	7800	6020	5550	7150	7020	9130	8580	6500	5530	5330	7240
14	10000	8130	5860	5670	7080	7020	9110	8580	6560	5140	6300	6760
15	9820	8130	5670	5840	7480	6930	9130	8560	6560	5050	6340	6410
16	11900	8130	5530	6100	7300	6870	9180	8480	6540	5000	6390	6200
17	13100	8220	5450	6320	7440	6950	9180	8290	6560	4940	6340	8220
18	17100	8480	5370	8660	7630	7150	9160	8010	6180	5000	6160	21500
19	21500	8390	5310	8060	7750	7060	9130	7910	6100	5020	6200	62500
20	23200	8180	5140	8030	7910	7440	9130	7680	6120	5110	6690	103000
21	17500	8060	5130	10100	7820	7510	9130	7410	6000	5130	18500	73400
22	14100	7960	5000	17500	7840	7350	9080	6870	5690	5130	14800	81200
23	12900	7870	4710	14000	7890	7220	8960	6780	5330	5130	8480	136000
24	12400	7770	5000	10200	7630	7350	8760	6780	5270	5130	9030	111000
25	11900	7750	5040	8930	6840	7910	8710	6800	5270	5140	8560	75300
26	10400	7750	4980	10800	6430	8270	8660	6780	5180	5140	7240	66300
27	9590	7820	4960	11000	6240	8320	8630	6780	5200	5090	6690	84200
28	9210	8100	5000	9460	6120	8340	8580	6760	5220	5140	6470	76700
29	8930		5310	8980	6140	8320	8560	6820	5240	5140	6340	68100
30	8760	—	5860	9440	6080	8630	8560	6840	5200	5130	6240	63000
31	9010	—	5730	—	5960	—	8600	6740	—	5130	—	60000
Mean	12380	8212	5655	7539	7599	7098	9034	7990	6184	5140	6848	40420
Ac-Ft	761100	456100	347700	448600	467200	422400	555500	491300	368000	316000	407500	2485000

Maximum Discharge	Calendar year 150,000 c.f.s. December 23, 1955 of record 370,000 c.f.s. February 28, 1940	Total Runoff in Acre-Feet	Calendar Year	7526400
			Water Year	6102600

Division of Water Resources station located at Mile 130.8 above Sacramento. Records of flows in excess of 40,000 second-feet were computed by extending the rating curve. Period of record 1948 to date.
e Estimated

TABLE 23

FLOW OF SACRAMENTO RIVER AT BUTTE CITY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14200	9360	7950	5490	8970	5490	8590	8120	6560	5130	5050	5530
2	14800	11000	7330	5390	8400	5670	8590	8050	6630	5130	5090	5430
3	12300	9240	6850	5370	8610	5630	8710	8280	6690	5110	5070	5370
4	11000	8400	6470	5210	8470	5650	8830	8300	6740	5090	5070	5010
5	10300	7980	5990	5070	8140	5900	8850	8370	6670	5050	5170	4990
6	9940	7770	5800	4880	7880	6140	8760	8370	6760	5050	5210	13700
7	9560	7560	5670	4630	7910	6260	8690	8420	6830	5030	5170	31100
8	9340	7360	5610	4630	8120	6300	8660	8470	6850	5170	5190	13000
9	9240	7240	5650	4780	8000	6160	8640	8490	6610	5230	5210	10700
10	11100	7160	6010	4880	7630	6090	8690	8450	6520	5270	5170	13800
11	11800	7050	6410	4820	7200	6160	8690	8420	6520	5430	5010	9720
12	10500	6980	6320	4820	6940	6410	8660	8230	6520	5550	4990	7980
13	9820	7380	6240	5130	6740	6540	8610	8090	6540	5570	5170	7290
14	9560	7840	6050	5290	6610	6580	8640	8090	6610	5190	6010	6800
15	9390	7860	5860	5470	6910	6470	8590	8090	6540	5050	6030	6430
16	10500	7880	5760	5610	6850	6430	8640	8020	6610	5030	6070	6200
17	12200	8000	5630	5880	6890	6450	8640	8020	6650	4970	6140	7380
18	13700	8230	5550	7520	6940	6720	8640	7900	6300	4970	5820	16500
19	19600	8230	5470	7840	7180	6650	8590	7600	6180	4990	5780	45600
20	19900	8050	5310	7520	7310	6910	8640	7400	6160	5010	6160	87200
21	17400	7950	5190	8540	7290	7070	8640	7200	6050	5050	12100	84900
22	13400	7840	5150	14700	7270	6910	8540	7000	5780	5090	16300	66200
23	12200	7770	4800	14000	7360	6830	8490	6700	5370	5090	8540	122000
24	11700	7720	4970	10100	7180	6800	8250	6500	5310	5050	8140	130000
25	11200	7660	5010	8640	6670	7450	8230	6500	5310	5090	8450	89600
26	10200	7680	4930	9690	6030	7720	8180	6500	5190	5070	7000	64100
27	9170	7750	4950	10800	5840	7820	8140	6500	5190	5030	6390	79800
28	8760	8000	4930	9220	5720	7880	8090	6600	5190	5030	6050	79700
29	8470		5210	8650	5700	7840	8090	6500	5190	5070	5900	69200
30	8250	—	5780	8810	5650	8000	8090	6500	5190	5010	5800	61000
31	8450	—	5800	—	5510	—	8120	6600	—	5030	—	57700
Mean	11550	7962	5763	7113	7159	6631	8523	7622	6175	5117	6442	39160
Ac-Ft	710000	442200	354300	423200	440200	394600	524100	468700	367500	314600	383300	2408000

Maximum Discherge	Calendar yeer 139,000 c.f.s. December 24, 1955 of record 170,000 c.f.s. February 7, 1942	Total Runoff in Acre-Feet	Calendar Yeer 7230700 Water Year 5799500

Station is maintained jointly by the Division of Water Resources and the U. S. Geological Survey. Stetion is at Butte City Bridge at Mile 115.8 above Sacramento. Period of record 1921 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 24

FLOW OF SACRAMENTO RIVER OPPOSITE MOULTON WEIR (GORDON PUMP) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1			8120	5820	8960	5620	8150	8170	6360	5440		
2			7720	5960	8340	5760	8200	8140	6430	5440		
3			7100	5910	8320	5740	8270	8310	6500	5390		
4			6750	5820	8390	5730	8360	8380	6580	5380		
5			6130	5710	8050	5920	8410	8390	6530	5340		
6			5930	5560	7750	6030	8380	8380	6580	5350		
7			5820	5540	7700	6150	8350	8360	6660	5300		
8			5790	5510	7870	6150	8300	8390	6750	5360		
9			5850	5530	7800	6080	8270	8380	6590	5390		
10			6100	5530	7560	6000	8300	8280	6550	5400		
11			6590	5530	7080	6070	8330	8200	6560	5480		
12			6640	5540	6780	6280	8330	8070	6620	5560		
13			6740	5620	6590	6400	8310	7930	6630	5540		
14			6660	5620	6450	6440	8350	7910	6760	5300		
15			6500	5820	6690	6470	8350	7880	6720	5180		
16			6380	5850	6640	6460	8390	7770	6730	5120		
17			6260	6050	6660	6470	8440	7710	6750	5060		
18			6220	7160	6750	6660	8460	7400	6490	5060		
19			6110	7960	7030	6650	8460	7330	6360	5000		
20			5960	7520	7110	6790	8550	7120	6330	5010		
21			5900	8290	7180	7000	8540	7020	6260	5040		
22			5790	13900	7160	6860	8460	6600	6040	5040		
23			5560	14600	7160	6810	8430	6470	5740	5040		
24			5630	10600	7030	6780	8230	6390	5640	4990		
25			5050	8910	6670	7130	8190	6360	5620	4960		
26			5560	9470	6060	7400	8170	6390	5540	4980		
27			5590	10800	5880	7560	8150	6330	5530	4960		
28			5590	9340	5810	7570	8140	6320	5520	5010		
29			5770	8660	5760	7570	8140	6350	5480	5040		
30		—	6240	8660	5760	7620	8140	6390	5470	5060		
31		—	6370	—	5680	—	8150	6370	—	5090	—	
Meen			6226	7426	7054	6539	8313	7467	6277	5204		
Ac-Ft			382800	441900	433700	389100	511100	459200	373500	320000		

Maximum Discherge		Total Runoff in Acre-Feet	Calendar Yeer Water Year

Division of Water Resources Station located at Mile 103.3 above Sacramento. Daily flow records were computed for the irrigation season only as part of the Sacramento River Trial Water Distribution program. The records are based on current meter measurements and on correlation with adjacent gaging stations, and should not be considered to have the same degree of accuracy as the records for other gaging stations published in this report. Stetion moved downstream to new location on May 27, 1955. Records are computed for the irrigation season only.

TABLE 25

FLOW OF SACRAMENTO RIVER AT COLUSA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11400	8810	8020	5660	8770	5320	7700	7600	6330	5250	5240	5830
2	14500	10800	7790	5400	8400	5310	7860	7580	6400	5240	5130	5590
3	13200	9940	7150	5320	8120	5410	7890	7740	6500	5200	5120	5620
4	11600	8860	6920	5280	8370	5380	8000	7890	6560	5200	5100	5320
5	10600	8290	6350	5110	8100	5510	8070	7980	6580	5190	5160	5200
6	10100	7980	6060	4950	7810	5710	8110	7970	6560	5180	5210	6890
7	9730	7790	5910	4690	7680	5980	8090	7970	6600	5170	5230	22400
8	9420	7600	5810	4510	7810	6000	8020	8040	6730	5190	5200	20900
9	9240	7490	5820	4620	7890	5960	7990	8040	6710	5280	5240	12000
10	10000	7370	5950	4780	7680	5840	8010	8020	6510	5340	5220	13100
11	11600	7300	6380	4690	7280	5800	8020	8000	6450	5430	5110	11300
12	11000	7210	6500	4580	6890	5950	8050	8000	6450	5570	5050	8820
13	10100	7270	6420	4820	6700	6150	8010	7830	6450	5660	5060	7790
14	9690	7790	6330	4940	6490	6210	7960	7740	6510	5590	5650	7250
15	9480	7910	6120	5130	6530	6200	7970	7750	6600	5350	5950	6840
16	9670	7920	5970	5200	6710	6160	7930	7710	6600	5260	5980	6500
17	11600	7960	5850	5360	6610	6110	7990	7670	6620	5200	6110	6600
18	12000	8090	5750	5900	6710	6250	8000	7570	6610	5160	5860	10300
19	17400	8260	5680	7680	7010	6400	7980	7340	6350	5160	5780	23400
20	19000	8140	5520	7030	7110	6410	7990	7190	6240	5180	5950	35000
21	20500	8020	5350	7350	7220	6700	8000	7020	6210	5220	8060	38400
22	15700	7900	5300	11000	7220	6680	7960	6800	6060	5250	16200	36800
23	13200	7840	5100	14000	7170	6530	7930	6430	5780	5260	10800	39100
24	12200	7760	4960	11400	7100	6470	7820	6300	5460	5270	7890	42000
25	11700	7700	5110	9240	6910	6630	7700	6270	5320	5280	8520	40600
26	11100	7670	5000	8730	6190	7000	7640	6270	5290	5240	7400	37900
27	9800	7690	4990	10300	5840	7220	7600	6290	5220	5240	6680	37500
28	9200	7880	4970	9680	5690	7310	7570	6270	5190	5230	6310	38400
29	8820		5030	8720	5550	7320	7550	6280	5180	5260	6080	37800
30	8540	—	5480	8340	5550	7300	7530	6370	5170	5210	6000	36800
31	8470	—	5900	—	5450	—	7540	6380	—	5270	—	36200
Mean	11630	8044	5919	6814	7050	6241	7886	7300	6175	5275	6410	20910
Ac-Ft	715200	446800	363900	405400	433500	371300	484900	448900	367400	324400	381400	1286000

Maximum Discharge	Calendar year 42,200 c.f.s. December 24, 1955 of record 49,000 c.f.s. February 8, 1942	Total Runoff in Acre-Feet	Calendar Year 6029100 Water Year 5756400

Station is maintained jointly by the Division of Water Resources and the U. S. Geological Survey. Station is at the Colusa Bridge, Mile 89.4 above Sacramento. Period of record 1921 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 26

FLOW OF SACRAMENTO RIVER AT MERIDIAN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11100	9880	8580	5850	9210	5830	7790	7800	6170	5240	5080	6170
2	14400	11300	8360	5550	8010	5870	8100	7780	6280	5240	5120	5740
3	14200	11200	7730	5430	8600	5950	8120	7890	6390	5220	5140	5690
4	12800	10200	7450	5400	8770	5860	8240	8080	6510	5190	5140	5430
5	11700	9530	6890	5200	8580	6010	8310	8080	6550	5200	5180	5280
6	11200	9110	6560	4940	8280	6210	8320	8050	6580	5180	5250	6160
7	10800	8840	6380	4680	8150	6400	8240	8070	6730	5180	5280	20300
8	10500	8630	6240	4470	8250	*6460	8167	8160	6870	5210	5230	22900
9	10300	8460	6300	4540	8310	*6310	8120	8160	6840	5320	5260	14400
10	10700	8270	6440	4700	8090	6110	8170	8150	6720	5420	5260	13000
11	12300	8140	6850	4600	7630	6090	8190	8130	6720	5510	5130	12900
12	12200	8050	6970	4480	7180	6160	8190	8100	6770	5650	5060	10500
13	11400	8040	6900	4670	6920	6390	8140	792	6800	5740	5120	9150
14	11000	8480	6800	4810	6800	6440	8110	7840	6860	5580	5820	8450
15	10700	8600	6600	5000	7000	6380	8110	7820	6950	5340	6330	7870
16	10800	8590	6420	5100	7230	6370	8060	7800	7070	5230	63 0	7420
17	12300	8630	6260	5290	7050	6410	8110	7720	7110	5170	6460	7230
18	13000	8740	6160	5620	7190	6560	8130	7520	7090	5100	6300	1 100
19	16800	8900	6090	7540	7550	6680	8090	7300	6800	5110	6180	21800
20	18800	8800	6890	*7070	7720	6680	8130	7120	6770	5120	6330	36500
21	20000	8680	5630	7410	7800	7000	8140	7000	6713	5190	7550	40700
22	17100	8570	5590	10400	7840	6850	8100	6730	6470	5210	15300	39800
23	14700	8470	5330	13800	7790	6650	8100	6350	6110	5230	12800	41800
24	13600	8360	5170	12200	7720	6560	7960	6220	5750	5220	9140	45100
25	13000	8280	5290	9920	7540	6730	7820	6170	5620	5220	9110	44200
26	12400	8250	5220	9220	6800	7090	7730	6160	5460	5220	8380	41600
27	11300	8240	5170	10400	6440	7350	7710	6170	5420	5070	7400	40700
28	10600	8420	5140	10200	6270	7410	7720	6130	5350	5080	6850	41600
29	10200		5160	9240	6100	7410	7710	6140	5330	5120	6540	41000
30	9870	—	5620	8880	6060	7380	7730	6200	5290	5150	6370	40000
31	9700	—	6040	—	5950	—	7730	6140	—	5100	—	38200
Mean	12560	8845	6299	6890	7540	6520	8041	7319	6406	5250	6683	22360
Ac-Ft	772500	491200	387300	410000	463600	388000	494400	450000	381200	32280	397700	1375000

Maximum Discharge	Calendar year 45,[illegible] c.f.s. December [illegible], 195[illegible]	Total Runoff in Acre-Feet	Calendar Year 6333700 Water Year

Division of Water Resources Station located at Mile [illegible].85 above Sacramento. The records are based on current water measurements made during 1954 and 1955 only, and on correlation with adjacent gaging station and should not be considered as having the same degree of accuracy as the records for other gaging stations published in this report.
e Estimated

TABLE 27

FLOW OF SACRAMENTO RIVER BELOW WILKINS SLOUGH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9760	9070	8300	5660	8010	4650	6290	6240	5150	5140	5030	6150
2	13100	10100	8200	5320	7960	4620	6690	6200	5240	5120	5040	5740
3	13700	10600	7680	5250	7540	4700	6740	6220	5430	5110	5070	5620
4	12300	9710	7300	5160	7590	4660	6840	6410	5570	5090	5080	5480
5	11200	9020	6950	4910	7450	4700	6960	6460	5660	5070	5090	5240
6	10600	8560	6550	4660	7180	4900	7020	6440	5710	5060	5160	5370
7	10200	8280	6360	4450	7020	5060	7030	6450	5860	5070	5220	14100
8	9820	8080	6220	4350	7080	5080	7000	6510	6070	5070	5180	20200
9	9580	7900	6180	4200	7300	4970	6960	6510	6200	5180	5200	15300
10	9720	7750	6290	4100	7280	4830	7020	6490	6120	5290	5220	12700
11	11100	7620	6600	3940	6940	4740	7070	6450	6130	5420	5140	12800
12	11500	7530	6880	3800	6380	4780	7060	6450	6210	5510	5050	10700
13	10700	7460	6820	3840	6080	5000	7070	6310	6320	5610	5040	9170
14	10200	7820	6730	3980	6000	5080	6950	6240	6420	5570	5420	8330
15	9940	8040	6560	4100	6080	5020	6840	6240	6550	5280	6140	7760
16	9860	8100	6390	4210	6260	5030	6710	6220	6630	5140	6260	7330
17	10900	8120	6230	4410	6100	5100	6720	6220	6740	5080	6320	6990
18	11900	8210	6090	4600	6110	5170	6660	6110	6800	5010	6250	8460
19	14500	8400	6000	6130	6340	5350	6630	5910	6580	5000	6120	16200
20	17500	8370	5860	6220	6480	5360	6640	5780	6500	5000	6160	22700
21	18900	8260	5590	6480	6580	5610	6690	5660	6450	5070	6670	24200
22	16800	8170	5500	8460	6690	5660	6670	5510	6270	5100	12400	24500
23	14100	8060	5340	12300	6690	5410	6640	5120	5980	5130	13100	25200
24	12900	7980	5060	11800	6610	5310	6550	4930	5600	5140	9490	26000
25	12200	7910	5100	9690	6460	5330	6410	4880	5430	5140	8730	26100
26	11700	7870	5070	8640	5870	5620	6270	4890	5360	5120	8340	25600
27	10700	7910	4980	9250	5360	5850	6180	4940	5220	5010	8160	25000
28	9950	8040	4970	9430	5100	5930	6180	4950	5120	5000	6800	25100
29	9480		4970	8450	4910	5960	6200	4960	5090	5040	6430	25000
30	9190	—	5150	7880	4800	6010	6210	5080	5070	5080	6290	24600
31	8980	—	5650	—	4730	—	6220	5110	—	5070	—	24300
Mean	11710	8319	6180	6189	6483	5183	6681	5867	5916	5152	6520	15550
Ac-Ft	720000	462000	380000	368300	398600	308400	410800	360800	352000	316800	388000	955900

Maximum Discharge	Calendar year 20200 December 24, 1955 of record 26600 c.f.s. February 8, 1942	Total Runoff in Acre-Feet	Calendar Year 5421600 Water Year 5492900

Station is maintained jointly by the Division of Water Resources and the U. S. Geological Survey. Station is located at Mile 62.9 above Sacramento, 0.3 of a mile below Wilkins Slough pumping plant of Reclamation District 108, and 1.3 miles below Tisdale Weir. Period of record 1931 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 28

FLOW OF SACRAMENTO RIVER ABOVE RECLAMATION DISTRICT 108 DRAIN PLANT - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1			8410	5430	7940	4520	6140	6170	5180	5140		
2			8370	*5230	7840	4480	6640	6140	5280	5040		
3			*7840	*5080	7270	4620	6680	6140	5460	5060		
4			7390	*5030	7380	4600	6850	6370	5660	5020		
5			6980	*4800	7230	4420	6880	6450	5710	5040		
6			6440	*4550	6940	4700	6880	6440	5750	5010		
7			6260	*4330	6770	4860	6860	6500	5890	5030		
8			6070	*4130	6780	5040	6860	6510	6110	5010		
9			6030	*3950	6950	4940	6780	6570	6300	5090		
10			6100	*4010	6870	4850	6760	6530	6200	5280		
11			6240	4050	6600	4760	6830	6550	6220	5390		
12			6610	*3800	6070	4810	6750	6510	6260	5470		
13			6620	3540	5640	5030	6720	6370	6430	5610		
14			6570	3720	5480	5150	6640	6300	6530	5590		
15			6380	3850	5710	5140	6570	6270	6630	5310		
16			6250	4020	6100	5060	6450	6260	6700	5120		
17			6160	4200	6060	5150	6490	6280	6900	5060		
18			6020	4440	6100	5210	6460	6220	7020	5000		
19			5930	5890	6290	5380	6510	6000	6810	4960		
20			5760	6280	6420	5430	6540	5790	6690	4960		
21			*5490	6470	6490	5660	6520	5780	6640	5020		
22			*5270	8290	6730	5800	6550	5620	6450	5090		
23			*5250	12500	6650	5540	6490	5200	6110	5110		
24			*5050	12100	6440	5410	6470	4930	5750	5140		
25			*5100	9560	6360	5380	6290	4880	5530	5140		
26			*5000	8410	*5870	5640	6150	4930	5370	5160		
27			*4920	9000	*5340	5920	6020	4980	5240	5020		
28			*4900	9360	*5100	5970	6010	5070	5220	4990		
29			*4950	8410	*4850	5960	6070	4980	5170	5040		
30		—	*5190	7760	*4720	5950	6050	5110	5160	5080		
31		—	5100	—	*4590	—	6140	5160	—	5070	—	
Mean			6085	6073	6309	5179	6518	5904	6012	5131		
Ac-Ft			374200	361400	387900	308200	400800	363000	357800	315500		

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year

Division of Water Resources station located at Mile 46.4 above Sacramento. Station installed on February 3, 1955. Daily flow records were computed for the irrigation season only, as part of the Sacramento River Trial Water Distribution program. The records are based on current meter measurements and on correlation with adjacent gaging stations and should not be considered to have the same degree of accuracy as the records for other gaging stations published in this report.

TABLE 29

FLOW OF SACRAMENTO RIVER AT KNIGHTS LANDING - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9490	9850	8830	6450	8820	5310	6730	7030	6440	5770	5670	6770
2	12500	10300	8950	6060	9020	5130	7110	6950	6510	5730	5610	6350
3	14600	11500	8470	6010	8830	5340	7280	6950	6770	5770	5650	6140
4	13600	11000	7900	6020	8690	5220	7430	7100	7190	5770	5680	5980
5	12400	10200	7490	5610	8630	5400	7440	7260	7290	5770	5670	5780
6	11800	9630	7050	5170	8150	5300	7420	7260	7350	5740	5780	5470
7	11500	9210	6910	4860	7700	5460	7410	7260	7580	5800	5870	11400
8	10900	8920	6720	4440	7690	5430	7440	7270	8020	5680	5840	22800
9	10700	8670	6620	4070	7910	5070	7290	7460	8310	5730	5800	18000
10	10600	8440	6530	4160	8050	4780	7180	7420	8230	5920	5800	13700
11	11400	8260	6610	4330	7710	4830	7230	7280	8340	6130	5790	14400
12	12600	8150	7200	4060	7040	4980	7120	7270	8310	6170	5730	12900
13	12500	8020	7200	3960	6790	5210	7260	7170	8310	6270	5700	10800
14	11800	8190	7300	4040	6940	5450	7260	7190	8230	6260	5920	9420
15	11300	8480	7010	4080	7280	5400	7150	7240	8160	6080	6780	8600
16	10700	8570	6890	4030	7420	5510	6980	7190	8110	5820	7040	7990
17	11000	8610	6840	4090	7480	5720	7040	7210	8250	5750	6990	7530
18	12600	8580	6750	4360	7620	5830	7120	7160	8250	5610	7010	8320
19	14000	8770	6530	5240	7880	6010	7120	6970	7960	5670	6750	13600
20	18700	8940	6420	6410	7870	6050	7150	6910	7660	5610	6730	22100
21	20600	8900	6200	6350	7780	6160	7300	6890	7460	5750	7000	25000
22	19800	8780	5980	8060	8300	6320	7350	6610	7300	5740	11100	25000
23	16600	8650	5780	12700	7820	5980	7400	6210	6990	5730	15200	25000
24	15300	8620	5420	13900	7580	5850	7370	6010	6560	5830	11400	25900
25	14400	8490	5390	11700	7160	5720	7260	5970	6300	5810	9680	26600
26	13700	8430	5290	10100	6540	5770	7050	6010	6180	5760	9370	24900
27	12500	8380	5240	10200	5990	6010	6910	6050	6020	5660	8310	23800
28	11500	8130	5240	11100	5690	6360	6910	6270	5840	5560	7660	23600
29	10700		5320	9890	5630	6550	6900	6170	5860	5790	7130	24200
30	10300	—	5330	8970	5350	6550	6910	6330	5790	5620	6860	24700
31	9900	—	5970	—	5410	—	7000	6380	—	5700	—	24800
Mean	12900	8952	6625	6681	7444	5623	7178	6853	7319	5806	7184	15860
Ac-Ft	793400	497200	407400	397500	457700	334600	441400	421400	435500	357000	427500	975000

Maximum Discharge	Calendar year daily mean 27,800 c.f.s. (a) December 24, 1955 of record 27,900 c.f.s. February 9, 1942	Total Runoff in Acre-Feet	Calendar Year	5945600
			Water Year	6072700

Station is maintained jointly by the Division of Water Resources and the U. S. Geological Survey. It is located at the Knights Landing Railroad Bridge, Mile 34.0 above Sacramento, below the point of discharge to the river of Colusa Basin drainage via the Back Borrow Pit of Reclamation Districts 108 and 787. Period of record 1921 to date. Records for 1955 computed by U. S. Geological Survey.

(a) Station has been rated entirely by slope method since 1952. Instantaneous flows have not been computed during this period

TABLE 30

FLOW OF SACRAMENTO RIVER AT VERONA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16300	13900	15100	14300	15900	12800	7040	7760	7460	7020	6840	8990
2	23800	15000	14000	12900	16100	11400	7520	7740	7280	6950	6920	8970
3	25700	15800	13200	12400	15700	10100	7740	7680	7520	6720	7130	9200
4	22500	15100	12200	11700	15400	9890	7900	7780	7970	6520	7250	8720
5	19800	14100	11600	10800	15600	10000	8000	7870	8200	6520	7250	8230
6	17700	13300	11100	9740	15700	11000	7950	7870	8360	6530	7240	9130
7	16100	12400	10500	8930	17200	11700	8000	7920	8470	6540	7140	20000
8	15100	12000	10200	8200	18600	10800	8020	7970	8810	6600	7190	28100
9	14500	11800	10200	7730	21100	10200	7840	8140	9290	6940	7220	25800
10	14700	11500	11000	8300	23000	9830	7680	8200	9440	6830	7260	21300
11	17000	11300	12900	8990	22500	9110	7700	8110	9440	6890	7220	20200
12	18100	11300	13900	9100	21000	8520	7680	8000	9460	7300	7070	17800
13	17100	11200	13900	8810	20400	8180	7710	8000	9460	7720	7060	15100
14	16200	11100	13600	8270	20000	8250	7810	8000	9730	7830	7300	13600
15	15700	11500	13300	7700	19200	8140	7790	8030	10100	7520	8380	12600
16	16600	12000	12900	6940	17200	8340	7660	8000	10200	7260	9170	11700
17	19700	12200	12200	6750	15300	8130	7570	8000	10600	7160	9330	11300
18	20700	12700	11600	7260	14900	8100	7630	7950	11200	7180	9350	12800
19	26500	13600	11200	9170	14900	7780	7660	7760	10400	7040	9490	22900
20	30300	13500	10900	10600	16100	7580	7760	7630	9870	6900	9620	47800
21	29500	13200	10400	11300	17200	7380	7800	7620	9650	6950	9510	59200
22	27300	12900	10100	14800	18400	7360	7900	7490	9350	6960	13600	62400
23	23500	12800	9730	22100	18200	7020	7800	7070	9040	6960	18800	70000
24	20900	12400	9200	23100	17700	6560	7800	6880	8430	6920	15700	66200
25	19400	12400	9010	21100	17200	6260	7700	6800	8140	6720	13100	63600
26	18200	12300	9190	19400	15600	6200	7650	6750	7730	6780	12300	65400
27	17100	12900	9420	19200	13500	6370	7490	6800	7460	6820	11200	65800
28	15700	16100	9740	19000	12700	6590	7380	7010	7200	6920	10200	65800
29	15000		10900	17700	12600	6940	7470	7070	7020	6960	9260	64700
30	14200	—	13800	16500	12900	6980	7520	7100	6880	7060	8930	63000
31	13800	—	15400	—	12700	—	7630	7330	—	6980	—	61200
Mean	19310	12870	11690	12430	16920	8584	7703	7624	8805	6968	9268	33600
Ac-Ft	1188000	714600	718800	739400	1040000	510800	473700	468800	524000	428400	551500	2066000

Maximum Discharge	Calendar year 71,400 c.f.s. December 23, 1955 of record 79,200 c.f.s. March 1, 1940	Total Runoff in Acre-Feet	Calendar Year	9424000
			Water Year	9111200

Station is maintained jointly by the Division of Water Resources and the U. S. Geological Survey. It is located at Mile 19.6 above Sacramento at the mouth of "Natomas Cross Canal", main drain between Reclamation Districts 1000 and 1001, and below the mouth of the Feather River. Flows are measured below the mouth of Cross Canal. Drainage area is 1400 square miles. Period of record 1926 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 31

FLOW OF SACRAMENTO RIVER AT SACRAMENTO - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21300	16500	18700	15000	21800	21000	8700	9360	9380	7940	7900	10100
2	32600	17800	16600	14000	22100	16200	8720	9380	9340	7970	7840	9860
3	30500	19100	16000	13200	20800	13800	9130	8940	9530	8040	7970	10200
4	27600	18600	15100	12500	19500	13300	9280	8420	9940	7870	7890	9980
5	23700	17100	14100	11700	20200	14500	9140	8550	10300	7900	7970	9820
6	21100	16100	13600	10600	20100	18400	8650	9030	10400	7860	7810	10000
7	18300	14900	12700	9770	21500	19200	8690	9410	10300	7770	7840	17900
8	17700	13900	12100	9040	23100	15500	8680	9270	10600	7890	7950	28400
9	17000	13800	12000	8330	26200	15400	8570	9680	10300	8100	7900	28000
10	17000	13500	12700	8700	28800	15600	8420	9550	10200	8130	7970	23700
11	19400	13200	15200	8250	28000	15100	8460	9200	10300	8010	7800	21700
12	20700	13000	16700	9420	24400	13200	8810	9200	9970	8170	8050	20200
13	19800	12900	17400	9230	23400	12200	9200	9230	10000	8690	8430	17100
14	18900	12500	17100	8590	23500	11600	9200	9350	10200	8690	8090	15300
15	18600	12800	16600	8180	23600	11200	9200	9280	10600	8460	8900	14000
16	19600	13100	16200	7760	21700	10900	9100	9200	10700	8350	9740	13200
17	23800	13700	15300	7640	18900	10200	9000	9180	11000	8200	9720	12600
18	24300	15700	14300	8090	18400	11100	9100	9260	11800	8270	9960	13800
19	31200	17200	13600	9070	18300	10700	9200	9030	11200	7970	9970	21600
20	33900	16700	13100	10600	18700	9400	9300	8970	10700	7620	9970	47000
21	32700	15800	12900	11300	19500	9700	9300	8860	10600	7540	9860	66500
22	30400	15400	11200	14200	20100	10000	8000	8780	10100	7490	12100	71600
23	26600	14900	10700	23600	20800	8470	9100	8650	9620	7370	18900	90200
24	24200	14700	10100	26000	21000	8280	9400	8770	8960	7330	17600	86200
25	22700	14000	9910	24300	22500	8320	9400	8650	8630	7420	15000	84500
26	21500	13400	9770	22500	22100	8300	9460	8510	8410	7470	13800	85600
27	20500	14100	9900	22700	19900	8180	9260	8550	8110	7420	12700	85300
28	19100	18700	10200	23000	19000	8780	8980	8630	8110	7580	11600	82200
29	17800		10500	23500	20300	8810	9000	8830	8070	7760	10600	78100
30	17000	—	13000	22600	19900	8290	9000	8910	7970	8060	10100	74400
31	16300	—	16000	—	21600	—	9250	9150	—	7990	—	69400
Mean	22770	15110	13650	13780	21600	12190	8990	9025	9845	7914	10060	39630
Ac-Ft	1400000	839200	839600	819900	1328000	725200	552800	554900	585800	486600	598900	2437000

Maximum Discharge	Calendar year 95,300 c.f.s. December 23, 1955 of record 104,000 c.f.s. November 21, 1950	Total Runoff in Acre-Feet	Calendar Year 11167900 Water Year 10618400

Station is maintained jointly by the Division of Water Resources and U. S. Geological Survey. It is located at Mile 0.4 above M Street Bridge. This represents the flow of the Sacramento River past Sacramento (below the City of Sacramento intake) to the Delta. Additional water flows to the Delta via East Borrow Pit of Yolo By-Pass (see Tables 87 and 101). Daily mean flows are computed from newly derived curves which take into account tidal fluctuations during low stages. Period of record 1904, 1905, 1921, 1924 to date. Records for 1955 computed by U. S. Geological Survey. Station washed out by high water on December 23, 1955.

TABLE 32

FLOW OF CLEAR CREEK NEAR IGO - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	283	368	199	177	700	165	72	27	19	22	29	120
2	260	335	196	168	700	160	70	26	18	21	31	125
3	241	303	193	163	650	151	74	26	18	22	31	105
4	226	279	180	157	600	146	85	25	18	22	31	93
5	220	264	168	151	600	140	80	24	17	22	32	232
6	206	248	163	146	550	133	72	24	17	22	34	552
7	196	234	163	140	520	125	67	24	17	22	32	271
8	190	223	163	138	500	120	64	24	17	22	31	223
9	202	220	177	138	480	112	60	24	18	22	30	347
10	199	212	183	138	430	112	58	23	18	25	28	260
11	186	206	180	135	400	117	57	22	18	30	28	216
12	177	202	180	133	380	115	54	21	17	29	29	223
13	174	199	180	130	360	115	50	21	18	27	38	220
14	171	199	174	130	340	117	46	20	20	26	45	202
15	180	199	168	130	320	125	43	21	25	26	43	190
16	180	206	163	127	300	112	40	21	26	26	52	206
17	180	220	160	130	290	103	42	22	25	24	54	287
18	327	212	154	133	280	98	41	20	24	24	91	2950
19	716	202	151	256	270	91	39	21	24	26	187	8100
20	450	196	146	845	260	87	38	20	23	27	797	6860
21	343	186	143	1700	250	85	37	20	22	28	436	10200
22	335	177	140	1400	240	82	35	20	22	28	186	14500
23	360	171	138	1200	226	80	34	19	21	27	190	7310
24	364	165	138	900	223	82	32	19	21	27	165	3740
25	360	165	138	950	212	80	30	19	20	26	133	3660
26	347	256	140	1000	206	80	30	20	20	28	115	3670
27	331	287	146	900	196	78	30	20	20	28	117	2420
28	319	216	168	800	183	76	31	20	20	28	125	1740
29	311		220	700	180	78	30	20	21	28	125	1350
30	347	—	212	650	171	74	29	20	22	28	112	1110
31	368	—	186	—	168	—	28	19	—	28	—	942
Mean	282	227	168	462	361	108	48.3	21.7	20.2	25.5	113	2336
Ac-Ft	17350	12600	10330	27500	22190	6420	2970	1330	1200	1570	6700	143700

Maximum Discharge	Calendar year 24,500 c.f.s. December 21, 1955 of record 24,500 c.f.s. December 21, 1955	Total Runoff in Acre-Feet	Calendar Year 253860 Water Year 148250

U. S. Geological Survey and U. S. Army Corps of Engineers cooperative station located nine miles upstream from the mouth. Clear Creek is a west-side tributary to the Sacramento River at Mile 237.1R. Drainage area is 231 square miles. Period of record 1940 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 33

FLOW OF COW CREEK NEAR MILLVILLE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1330	1650	268	330	690	170	37	14	7.6	28	54	34
2	768	746	271	323	948	161	37	15	11	30	54	371
3	536	576	271	287	700	154	46	10	11	26	58	290
4	446	495	249	268	630	143	42	9.2	10	28	65	277
5	414	459	228	252	576	129	42	11	11	32	72	2570
6	362	418	215	234	576	116	35	10	8.2	24	77	9210
7	319	382	212	226	620	111	37	11	9.6	26	71	1420
8	298	358	212	220	625	106	30	10	10	33	67	1160
9	450	338	234	223	585	102	32	9.6	6.7	36	64	3370
10	674	312	301	237	544	99	35	9.2	6.7	44	61	1060
11	442	298	291	220	531	108	29	6.7	8.2	55	65	701
12	362	291	287	207	513	102	24	6.3	13	50	71	568
13	338	284	278	209	486	102	21	8.2	13	43	93	474
14	319	271	258	226	442	93	23	9.2	17	41	124	410
15	362	261	237	218	394	102	20	10	49	40	126	357
16	1020	287	228	212	366	102	16	9.6	46	40	152	830
17	740	406	223	1470	342	91	21	6.9	46	38	168	4000
18	2170	338	218	845	319	86	20	6.1	47	37	264	6000
19	1830	287	209	640	334	76	14	7.9	32	43	629	9300
20	1260	271	204	790	346	61	10	8.2	28	53	7230	5400
21	872	261	196	1900	354	49	13	10	26	49	3330	3500
22	730	252	194	1720	350	46	14	10	25	49	590	8380
23	752	240	192	984	319	53	16	13	24	52	1000	12400
24	650	231	189	768	298	52	20	11	29	49	1090	4330
25	590	228	184	960	270	50	12	10	30	48	528	2790
26	549	234	186	1030	255	52	10	10	28	67	353	8000
27	486	350	196	695	231	48	13	12	25	66	296	5000
28	438	312	337	610	220	43	10	14	23	67	256	2570
29	406		605	1130	209	40	13	7.3	23	64	225	1840
30	508	—	495	918	204	44	24	6.5	23	62	204	1520
31	1010	—	362	—	186	—	15	7.3	—	61	—	1360
Mean	691	387	259	612	435	89.7	23.3	9.7	21.6	44.6	561	3225
Ac-Ft	42510	21490	15930	36400	26720	5340	1430	595	1280	2740	34590	198300

Maximum Discharge	Calendar year 19,200 c.f.s. December 23, 1955 of record 45,200 c.f.s. December 27, 1951	Total Runoff in Acre-Feet	Calendar Year	387325
			Water Year	262165

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located approximately five miles southwest of Millville. Cow Creek is an east-side tributary to the Sacramento River at Mile 228.8L. Drainage area is 427 square miles. Period of record 1949 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 34

FLOW OF COTTONWOOD CREEK NEAR COTTONWOOD - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1080	796	374	369	890	347	129	54	54	85	92	234
2	898	711	369	347	924	325	129	54	60	81	92	234
3	720	636	369	342	932	310	133	54	54	74	103	226
4	612	556	358	342	856	295	133	60	57	64	99	209
5	558	565	336	330	847	290	137	57	71	68	99	719
6	505	542	320	315	856	290	133	67	67	92	96	5980
7	453	520	310	305	906	280	110	64	78	92	96	1660
8	434	498	315	295	940	262	106	67	67	78	103	1050
9	434	492	336	290	906	257	99	64	54	67	92	1860
10	505	486	398	295	838	244	92	57	43	60	71	1180
11	446	479	416	295	804	262	89	50	50	67	60	872
12	404	466	398	295	762	280	88	47	50	67	54	788
13	386	453	392	295	720	257	88	47	71	74	50	702
14	369	416	380	290	677	248	92	50	78	85	74	620
15	386	440	369	285	652	248	85	67	85	85	70	550
16	528	453	336	280	620	234	85	64	81	88	92	558
17	528	512	320	392	580	217	85	64	85	78	114	786
18	1880	520	310	305	542	192	85	60	96	81	148	5260
19	3390	486	295	300	528	184	74	54	99	85	226	20300
20	2330	453	285	492	528	180	71	54	31	85	1080	14000
21	1230	434	280	1130	535	160	64	47	64	88	2110	9030
22	1040	416	270	1550	528	160	60	54	71	81	542	36900
23	983	404	266	1030	492	160	64	54	74	81	520	16900
24	915	386	257	949	466	156	60	50	78	81	620	8470
25	856	374	257	940	434	152	64	57	81	85	364	5040
26	796	374	262	1170	416	148	67	71	64	85	285	4880
27	745	416	266	949	404	140	67	67	64	96	257	2970
28	694	410	320	872	380	140	74	67	57	85	266	2230
29	660		374	864	364	137	67	67	67	78	266	1730
30	677	—	398	940	352	133	67	64	78	78	252	1400
31	736	—	380	—	352	—	60	64	—	88	—	1190
Mean	846	493	333	563	646	223	80.3	53.6	69.3	80.7	280	4780
Ac-Ft	52020	27360	20460	33530	39730	13270	5490	3600	4120	4960	16680	294400

Maximum Discharge	Calendar year 49,000 c.f.s. December 22, 1955 of record 52,300 c.f.s. March 1, 1941	Total Runoff in Acre-Feet	Calendar Year	515420
			Water Year	298400

U. S. Geological Survey and U. S. Army Corps of Engineers cooperative station located two miles upstream from the mouth. Cottonwood Creek is a west-side tributary to Sacramento River at Mile 222.2R. Drainage area is 945 square miles. Period of record 1940 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 35

FLOW OF BATTLE CREEK NEAR COTTONWOOD - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	550	516	288	346	338	349	202	172	159	162	184	247
2	406	349	291	321	379	335	202	167	157	155	184	262
3	346	321	294	298	395	338	208	167	143	169	184	233
4	307	307	281	298	379	346	210	164	150	167	184	218
5	318	301	298	281	368	360	208	164	150	164	189	1440
6	298	291	262	278	395	383	199	162	157	169	186	2410
7	288	298	278	281	442	364	194	157	152	172	197	495
8	284	288	262	284	462	360	197	167	157	167	184	403
9	338	284	288	284	474	357	194	159	155	157	184	483
10	434	281	342	291	466	357	192	157	155	184	186	328
11	335	278	399	304	470	357	192	159	150	199	179	284
12	304	276	379	284	479	328	186	159	155	189	192	276
13	301	275	342	281	483	328	184	159	152	174	199	262
14	301	288	328	284	442	328	182	155	159	167	221	256
15	411	278	301	281	406	314	176	162	174	167	202	247
16	568	281	294	281	391	288	179	152	172	157	224	298
17	399	307	281	307	376	275	169	155	182	169	241	1450
18	635	321	281	328	395	262	184	157	182	169	233	1970
19	458	301	262	324	422	253	179	155	184	167	266	4180
20	418	294	284	318	474	250	176	152	169	182	1280	2390
21	353	294	269	357	495	238	174	150	169	172	1160	1980
22	335	281	269	403	516	233	172	162	172	182	335	4360
23	321	281	272	379	491	233	176	155	164	176	314	4480
24	332	294	275	368	462	227	169	152	164	186	266	2170
25	304	294	278	387	442	224	182	152	162	179	250	1370
26	311	284	278	368	410	218	174	155	159	189	233	3470
27	314	288	291	346	399	227	169	152	169	189	224	1990
28	298	284	372	342	3 1	213	172	150	167	184	233	1290
29	291		430	353	387	210	176	164	167	182	221	990
30	301	—	368	353	395	208	179	157	169	179	216	879
31	379	—	335	—	383	—	164	157	—	184	—	819
Mean	364	301	306	321	426	292	185	158	163	174	285	1353
Ac-Ft	22390	16720	18810	19060	26200	17380	11350	9730	9670	10730	16960	83170

Maximum Discherge	Calendar year 7650 c.f.s. December 19, 1955 of record 12,800 c.f.s. February 6, 1942	Total Runoff in Acre-Feet	Celendar Year 262170 Water Yeer 211300

U. S. Geological Survey and U. S. Army Corps of Engineers cooperative station located three miles upstream from the mouth. Battle Creek is an east-side tributary to Sacramento River at Mile 221.5L. Dreinage aree is 362 square miles. Period of record 1940 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 36

FLOW OF PAYNES CREEK NEAR RED BLUFF - 1955

Dete	Deily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	280	212	32	19	55	3.3	0.1	0	0	2.7	3.3	12
2	139	130	32	22	53	3.3	0.2	0	0	2.7	3.5	12
3	89	96	32	21	52	3.1	0.4	0	0	2.9	3.5	12
4	68	81	32	20	45	2.9	0.5	0	0	2.9	3.5	12
5	61	68	30	19	40	2.7	0.4	0	0	2.7	3.7	385
6	53	60	29	18	35	2.7	0.4	0	0	2.7	3.7	1110
7	47	57	29	12	33	2.9	0.3	0	0	2.9	3.5	209
8	42	52	29	9.6	31	3.1	0.2	0	0	2.9	3.3	121
9	46	47	32	9.6	28	2.9	0.2	0	0	3.1	3.3	166
10	106	45	36	10	26	2.9	0.2	0	0.1	3.3	3.3	81
11	89	42	36	9.6	21	3.5	0.1	0	0.3	3.3	3.1	57
12	76	40	34	9.6	15	3.7	0.1	0	0.4	3.3	3.1	46
13	96	39	33	9.0	12	3.7	0.2	0	0.5	3.1	4.0	41
14	77	37	33	.5	12	3.7	0.1	0	1.1	3.1	5.2	36
15	170	36	31	8.0	11	4.0	0	0	1.4	3.1	3.7	33
16	317	36	29	8.0	11	3.7	0	0.1	1.8	3.1	9.0	57
17	166	37	26	12	10	3.7	0	0.1	6.6	3.1	16	254
18	593	36	21	22	9.6	2.7	0	0.1	5.5	3.1	13	1040
19	289	34	19	23	9.0	1.2	0	0.1	5.2	3.1	6.6	2890
20	204	33	18	25	8.5	1.4	0	0	5.2	3.1	140	906
21	139	33	17	106	7.5	1.4	0	0.1	5.2	3.1	309	475
22	115	32	16	178	7.0	1.3	0	0.1	4.9	3.1	41	839
23	106	32	16	110	7.0	1.3	0	0.1	4.9	3.1	75	906
24	96	31	16	79	7.5	1.1	0	0.1	4.6	3.1	54	443
25	87	31	15	68	7.5	1.0	0	.1	4.6	3.1	28	272
26	79	30	15	94	7.0	1.2	0	0.1	3.7	3.3	22	1450
27	70	32	16	7	6.2	1.3	0	0.1	2.9	3.3	18	645
28	67	33	20	57	3.7	1.3	0	0.1	2.7	3.3	17	345
29	61		18	60	3.5	1.2	0	0.1	2.5	3.3	14	229
30	68	—	22	67	3.3	0.2	0	0	2.7	3.3	13	170
31	94	—	20	—	3.3	—	0	0.1	—	3.3	—	146
Mean	129	52.6	25.3	39.4	18.7	2.4	0.1	0.1	3.2	3.1	27.7	432
Ac-Ft	7910	2920	1560	2340	1150	144	7	3	192	189	1650	26580

Maximum Discherge	Celender yeer 5130 c.f.s. December 19, 1955 of record 5130 c.f.s. December 19, 1955	Total Runoff in Acre-Feet	Celender Year 44585 Water Yeer 31053

U. S. Geologicel Survey and U. S. Bureau of Reclemation cooperative station located approximately one mile above mouth. Paynes Creek is en east-side tributtery to Sacramento River at Mile 201.5L. Dreinage aree is 92.5 square miles. Period of record 1949 to date. Records for 1955 computed by U. S. Geologicel Survey.

TABLE 37

FLOW OF REDBANK CREEK AT FOOTHILLS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16	e21	5.5	2.5	22	1.9					0	0.9
2	14	e19	5.0	2.2	19	1.3					0	0.8
3	12	e16	5.0	1.9	16	1.0					0	0.8
4	11	e14	4.5	1.9	15	0.4					0	0.7
5	10	e12	4.0	1.6	12	0					0	14
6	9.0	e11	3.7	1.6	11	0					0	183
7	7.5	e10	4.0	1.3	11	0					0	28
8	7.5	e9.0	4.0	1.0	11	0					0	25
9	8.0	e8.2	5.0	1.0	10	0					0	48
10	9.7	7.5	7.5	0.9	9.7	0					0	18
11	e9.4	7.0	6.5	0.9	9.7	0					0	11
12	e8.0	7.0	5.0	1.0	10	0	N	N	N	N	0	8.0
13	e7.4	6.5	5.0	1.0	8.5	0	0	0	0	0	0	7.0
14	e7.4	6.0	4.0	1.0	9.0	0					0	5.0
15	e9.2	6.0	3.7	1.0	9.0	0					0	3.7
16	e11	6.0	3.4	1.0	9.0	0					0	4.0
17	e10	7.0	3.4	1.6	9.0	0	F	F	F	F	0	38
18	e72	5.5	3.4	2.2	8.5	0	L	L	L	L	0	849
19	e105	4.5	3.7	2.2	7.5	0	0	0	0	0	0	1400
20	e87	4.5	3.4	3.4	7.5	0	W	W	W	W	98	210
21	e64	4.5	3.4	199	6.5	0					20	1090
22	e53	4.5	3.7	123	5.5	0					1.6	906
23	e46	4.5	3.1	37	5.5	0					25	512
24	e41	4.5	3.1	25	6.0	0					20	210
25	e36	4.5	2.8	56	5.5	0					7.0	168
26	e31	5.0	2.5	71	5.0	0					4.0	145
27	e28	6.5	2.5	36	5.0	0					2.5	91
28	e25	5.5	2.8	27	4.5	0					1.6	67
29	e22		3.1	26	4.0	0					1.0	51
30	e23	—	2.8	27	3.1	0					1.0	43
31	e24	—	2.5	—	2.5	—			—		—	40
Mean	26.0	8.1	3.9	21.9	9.0	0.2	0	0	0	0	6.1	199
Ac-Pt	1635	451	241	1306	550	9	0	0	0	0	360	12250

Maximum Discharge	Calendar year 4740 c.f.s. December 21, 1955	Total Runoff in Acre-Feet	Calendar Year	16803
			Water Year	13053

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located approximately 15 miles above the mouth. Redbank Creek is a west-side tributary to Sacramento River at Mile 191.2R. Period of record 1948 to date. Record for 1955 computed by Division of Water Resources.
e Estimated

TABLE 38

FLOW OF ANTELOPE CREEK NEAR RED BLUFF - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	253	220	67	71	112	74	36	30	28	32	32	45
2	182	141	68	75	128	67	36	30	28	31	32	52
3	130	110	68	68	124	65	37	30	28	32	32	45
4	104	97	66	65	114	62	39	30	28	32	33	43
5	93	91	62	62	108	62	38	30	28	29	33	229
6	83	84	61	61	108	61	36	30	28	28	34	802
7	75	79	60	60	117	57	35	31	28	29	33	100
8	70	75	61	59	124	55	35	31	29	29	32	107
9	80	72	71	59	132	53	35	30	29	30	32	167
10	97	68	123	61	132	52	35	30	29	32	32	107
11	90	66	100	59	138	53	34	30	29	37	32	79
12	87	65	93	59	141	51	33	30	29	32	32	67
13	87	63	88	57	143	50	33	30	29	32	37	60
14	83	62	83	59	132	53	32	30	34	31	41	55
15	105	62	76	59	117	53	32	30	41	31	36	52
16	157	66	72	57	105	48	32	30	35	30	42	56
17	149	83	68	76	100	46	32	30	41	30	47	151
18	377	80	66	107	99	44	32	30	36	31	42	1130
19	245	74	63	112	108	42	32	30	33	34	45	4060
20	185	70	60	155	121	41	32	30	32	33	104	1280
21	145	66	59	436	126	40	32	30	32	28	234	923
22	132	63	57	317	121	38	32	29	32	31	70	2300
23	124	60	57	191	112	38	32	30	32	31	70	2300
24	114	60	56	153	105	38	31	30	32	30	70	1050
25	107	59	55	149	97	38	31	30	32	30	52	610
26	100	60	55	171	91	38	32	30	32	31	46	2250
27	91	70	56	128	87	38	32	30	31	32	44	1100
28	86	67	68	114	83	38	32	30	31	32	42	627
29	83		83	114	81	39	32	29	32	31	42	417
30	107	—	80	119	79	37	31	29	32	31	41	314
31	134	—	71	—	78	—	30	29	—	31	—	268
Mean	128	74.3	70.1	111	112	49.0	33.3	29.6	31.3	31.1	49.8	677
Ac-Pt	7840	4430	4310	6610	6860	2920	2050	1840	1860	1940	2960	41630

Maximum Discharge	Calendar year 8510 c.f.s. December 24, 1955 of record 10,400 c.f.s. February 6, 1942	Total Runoff in Acre-Feet	Calendar Year	85220
			Water Year	57920

U. S. Geological Survey and U. S. Army Corps of Engineers cooperative station located six miles upstream from the mouth. Antelope Creek is an east-side tributary to Sacramento River at Mile 1[illegible].L. Drainage area is 124 square miles. Period of record 1940 to date. Records for 1955 computed by U. S. Geological Survey.
Flow of Antelope Creek enters the Sacramento River at a point 2.3 miles above site previously reported.

TABLE 39

FLOW OF ANTELOPE CREEK NEAR MOUTH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	232	124	20	41	66	11	15	2.3	5.3	0.5	15	5.3
2	156	87	20	47	60	8.0	16	1.5	3.6	0	16	10
3	99	64	18	42	60	7.5	14	1.3	2.5	0.8	17	8.0
4	72	50	15	38	51	7.5	14	1.5	0.5	4.7	23	6.4
5	57	42	14	34	46	5.3	14	1.8	0.8	5.3	24	*191
6	44	37	13	34	39	5.8	13	3.1	1.0	7.5	25	*780
7	32	32	13	24	38	6.9	11	3.6	0.5	6.9	22	*159
8	26	28	13	18	34	5.8	13	2.5	0.5	6.9	20	*103
9	47	26	12	22	32	5.8	10	3.6	3.1	7.5	17	*150
10	133	25	25	22	33	4.7	8.8	6.9	7.5	13	18	*84
11	90	22	25	22	34	7.5	7.8	6.9	6.9	22	19	*66
12	67	19	22	22	36	5.3	8.8	4.7	3.6	20	22	*55
13	56	18	20	22	36	5.3	8.0	5.3	2.5	19	32	*46
14	51	18	22	22	34	4.7	6.4	5.3	3.6	19	46	*42
15	56	18	20	20	36	5.3	8.8	4.2	10	18	34	*40
16	143	20	17	17	33	4.2	10	4.2	12	16	41	*46
17	114	22	20	26	24	3.6	13	3.1	13	17	56	*145
18	*466	24	19	50	31	5.3	10	2.0	13	18	41	*1100
19	329	22	20	63	32	4.7	8.8	1.5	8.0	13	36	*3010
20	353	20	20	85	33	5.3	8.0	1.8	5.3	14	96	*1200
21	229	19	22	341	32	5.3	5.8	2.0	2.3	14	*220	*890
22	170	18	18	292	31	4.7	11	1.8	1.0	8.0	66	*2250
23	139	17	16	165	32	4.7	9.6	1.3	0	8.8	51	*2200
24	118	17	22	112	26	4.2	3.6	1.5	0.2	12	77	*1030
25	101	16	19	94	23	6.9	2.0	3.1	0.8	17	34	*575
26	84	16	14	137	19	7.5	3.6	8.0	2.0	18	20	*2180
27	66	15	13	92	17	10	3.1	5.8	1.0	20	13	*1090
28	56	17	28	75	14	16	2.5	1.3	0	22	11	*580
29	50		38	71	10	15	2.5	0.2	0	18	8.0	*360
30	44	—	41	75	11	13	4.7	1.5	0	19	6.4	*260
31	56	—	39	—	11	—	4.2	4.7	—	15	—	*230
Mean	120	30.5	20.6	72.8	32.7	6.9	8.8	3.2	3.7	12.9	37.6	638
Ac-Ft	7410	1692	1265	4215	2011	410	540	195	219	795	2230	39260

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	60242
			Water Year	29951

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located approximately 0.3 miles above the mouth. Antelope Creek is an east-side tributary to Sacramento River at Mile 182.6L. Period of record 1948 to date. Records for 1955 computed by Division of Water Resources.
Flow of Antelope Creek enters the Sacramento River at a point 2.3 miles above site previously reported.
* Estimated

TABLE 40

FLOW OF NORTH FORK MILL CREEK NEAR MOUTH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.5	1.6	1.6	8.1	2.9	2.4	3.1	0.2	0.4	0.6	1.7	11
2	2.9	1.5	1.5	6.2	3.1	2.0	2.0	0.1	0.1	0.7	2.9	10
3	2.8	1.4	2.4	6.2	2.8	2.5	1.9	0.1	0.2	1.0	3.5	6.0
4	2.6	1.4	2.9	6.0	2.6	1.5	1.4	.4	0.2	0.7	4.0	9.4
5	2.5	1.4	2.8	5.5	2.5	0.8	1.2	0.3	0.3	0.7	6.5	8.8
6	2.4	1.4	2.9	6.5	1.3	0.7	1.0	0.2	0.7	0.7	6.7	9.1
7	2.2	1.3	2.8	7.5	0.8	1.3	0.6	0.2	1.1	1.0	6.5	6.2
8	2.1	1.3	2.8	5.3	1.1	2.0	0.4	0.1	1.6	0.6	4.4	9.7
9	2.9	1.3	3.3	4.6	0.7	2.0	1.2	0.3	3.8	0.4	2.6	12
10	4.2	1.4	5.3	3.3	1.2	1.4	1.3	0.4	2.2	0.9	5.8	10
11	4.8	1.4	6.0	2.9	1.2	1.6	1.6	0.4	1.2	3.3	4.4	9.4
12	4.6	1.4	4.8	4.2	1.7	1.5	1.6	0.5	1.3	1.4	4.6	9.4
13	2.4	1.4	4.6	4.8	2.4	0.9	1.6	0.2	0.4	2.8	9.4	9.1
14	1.2	1.4	4.6	1.4	1.6	0.8	2.9	0.2	0.5	4.8	8.1	9.7
15	1.2	1.4	2.8	1.5	1.9	1.2	2.2	0.2	2.4	2.8	7.5	11
16	1.2	1.5	3.7	1.9	3.1	0.9	0.9	0.1	3.8	2.8	8.1	10
17	1.3	1.5	6.7	3.1	3.8	0.7	0.6	0.1	2.8	4.8	7.8	9.7
18	4.2	1.5	7.2	5.0	3.5	0.6	0.6	0	5.5	3.3	7.5	15
19	1.9	1.6	7.2	4.8	3.3	0.6	0.5	0.1	4.8	2.9	9.7	140
20	1.6	1.5	7.5	5.5	2.8	1.2	1.3	0.1	3.3	2.1	14	139
21	1.4	1.5	5.3	6.5	2.2	2.2	1.2	0.2	3.7	2.2	9.1	13
22	1.7	1.6	4.0	4.6	1.5	2.8	2.0	.1	2.9	1.9	7.8	*228
23	1.7	1.6	5.3	4.2	0.7	2.2	0.6	0.2	3.8	1.5	7.8	*180
24	1.6	1.6	5.0	4.0	1.6	1.7	0.3	0.4	1.6	2.5	7.2	*75
25	1.7	1.5	4.2	4.2	2.2	1.5	0.2	0.2	1.1	2.8	9.1	*39
26	1.6	1.5	5.3	4.6	1.7	1.6	0.2	0.2	2.9	3.5	11	*98
27	1.6	1.7	4.8	3.4	1.6	1.9	0.1	0.2	2.9	2.6	11	*62
28	1.5	1.6	7.5	3.8	1.2	2.9	0.1	0.4	2.5	1.2	11	*30
29	1.5		7.5	2.8	1.2	1.5	0.2	0.2	1.6	1.1	11	*22
30	1.5	—	6.7	2.8	1.2	3.8	0.1	0.2	1.2	1.2	11	*17
31	1.5	—	6.0	—	1.5	—	0.3	0.1	—	1.2	—	*14
Mean	2.2	1.5	4.7	4.5	2.0	1.6	1.1	0.2	2.0	1.9	7.4	39.8
Ac-Ft	136	82	290	267	121	97	66	13	121	119	440	2445

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	4199
			Water Year	2217

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located approximately 0.5 mile above the mouth. This creek is an east-side tributary to Sacramento River at Mile 179.3L. Period of record 1948 to date. Records for 1955 computed by Division of Water Resources. Station washed out by high water on December 22, 1956.
* Estimated

TABLE 41

FLOW OF MILL CREEK NEAR LOS MOLINOS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	148	184	164	22[illegible]	264	242	151	106	85	91	94	126
2	200	204	164	258	312	236	146	106	85	91	94	126
3	213	185	164	234	331	302	155	104	85	89	94	121
4	182	174	161	219	325	315	154	104	84	91	94	113
5	174	172	156	207	344	354	146	104	82	91	108	366
6	164	164	154	207	433	361	144	104	[illegible]	89	106	1090
7	156	161	154	213	515	365	139	104	[illegible]	5[illegible]	98	317
8	151	161	159	216	515	348	134	102	[illegible]	87	94	205
9	164	159	202	228	466	341	134	102	[illegible]	89	94	255
10	1[illegible]	156	280	240	477	341	134	100	84	102	9[illegible]	174
11	164	156	243	228	477	328	131	100	84	137	94	147
12	156	156	243	216	4[illegible]	315	130	98	94	102	94	144
13	156	154	234	222	488	296	126	100	84	96	108	137
14	151	154	216	213	400	292	126	100	94	94	117	128
15	156	154	199	202	344	261	124	96	126	93	108	126
16	[illegible]	164	198	202	308	240	124	96	100	91	121	130
17	168	169	1[illegible]2	255	305	225	124	96	111	91	128	273
18	3[illegible]7	190	176	292	344	219	121	96	137	93	121	1330
19	2[illegible]6	177	179	29[illegible]	408	213	121	94	104	93	164	4290
20	234	172	177	411	462	207	119	94	98	94	499	2810
21	207	164	172	762	515	199	119	93	96	94	484	3020
22	202	161	166	477	500	190	117	91	94	94	179	6770
23	207	159	169	368	433	182	117	91	94	93	164	5380
24	196	156	174	365	415	177	117	91	94	91	140	2340
25	1[illegible]5	156	185	386	368	172	115	89	93	91	119	1390
26	179	161	190	358	337	169	115	91	91	100	113	2990
27	169	172	204	296	341	166	115	91	91	102	115	1840
28	169	164	312	276	337	161	113	89	91	94	115	1140
29	166		390	270	351	161	113	89	91	94	113	784
30	1[illegible]5	—	351	270	354	156	113	89	91	94	100	605
31	166	—	282	—	344	—	111	87	—	94	—	537
Mean	199	170	207	289	398	354	128	9[illegible].7	92.9	94.[illegible]	139	1278
Ac-Ft	12240	9460	12700	17200	24460	15140	7850	[illegible]940	5530	5820	8280	78550

Maximum Discharge	Calendar year 4180 c.f.s. December 22, 1955 of record 23,000 c.f.s. December 11, 1937	Total Runoff in Acre-Feet	Calendar Year	203180
			Water Year	146330

U. S. Geological Survey and Division of Water Resources cooperative station located five miles upstream from the mouth. Mill Creek is an east-side tributary to Sacramento River at Mile 179.0L. Drainage area is 134 square miles. Period of record 1909 to 1913; 1.26 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 42

FLOW OF MILL CREEK NEAR MOUTH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	433	284	156	156	176	153	13		6	5.6	34	110
2	341	203	161	139	221	141	7.4		0	7.3	55	125
3	246	176	156	118	242	156	7.1		0	7.1	54	120
4	203	161	156	103	231	167	5.6		0	8.5	55	109
5	1[illegible]7	15[illegible]	144	91	224	224	[illegible].6		0	13	59	321
6	164	144	136	[illegible]6	319	231	4.3		0	11	59	e1300
7	156	139	139	86	412	231	2.1		0	12	64	417
8	150	141	144	[illegible]0	433	221	1.7		0	12	80	253
9	176	147	176	97	401	217	1.2		0	13	84	315
10	166	144	300	112	355	217	1.0		0	18	7[illegible]	224
11	170	141	210	101	337	203	0.4		0	32	69	182
12	156	139	179	[illegible]8	341	184	0.6		0	16	5[illegible]	175
13	153	139	164	[illegible]9	341	156	0	N	[illegible]	15	64	173
14	147	139	144	88	257	147	0	O	0	14	71	156
15	156	141	116	[illegible]6	193	114	0		13	11	66	147
16	[illegible]21	150	[illegible]5	[illegible]0	158	93	0		6.2	[illegible].2	82	153
17	[illegible]06	190	[illegible]6	107	156	77	0	F	7.8	[illegible].6	105	289
18	471	193	75	170	190	64	0	L	22	16	101	2650
19	324	17[illegible]	66	170	253	58	0	O	13	23	120	e5000
20	[illegible]71	164	66	250	315	51	0	W	10	26	380	e3000
21	217	153	[illegible]4	[illegible]12	346	46	0		[illegible].5	29	591	e3100
22	[illegible]10	150	58	471	364	39	0		[illegible].9	32	137	e7600
23	[illegible]13	147	[illegible]0	306	[illegible]93	31	0		[illegible].1	30	158	e6000
24	1[illegible]	144	[illegible]8	[illegible]80	[illegible]75	26	0		5.[illegible]	24	139	e2500
25	1[illegible]4	144	59	315	235	24	0		[illegible].9	24	114	e1300
26	17[illegible]	153	[illegible]6	311	203	24	[illegible].8		[illegible].4	31	103	e3250
27	164	170	[illegible]4	224	196	22	[illegible]		5.4	32	107	e2050
28	1[illegible]	166	1[illegible]6	193	190	19	[illegible]		[illegible].6	26	107	e1040
29			2[illegible]9	184	[illegible].13	17	0		[illegible].1	26	105	e730
30	1[illegible]	—	249	144	213	14	0		[illegible].9	25	103	e560
31	193	—	1[illegible]	—	2[illegible]6	—	0		—	24	—	e430
Mean	212	16[illegible]	134	166	[illegible].69	112	1.6		4.5	19.0	115	1414
Ac-Ft	13[illegible]	[illegible]4	214	11[illegible]	2[illegible]538	[illegible]67[illegible]	101	[illegible]	[illegible]7	1170	6035	86[illegible]0

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	159749
			Water Year	98628

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located approximately 0.6 mile above the mouth. Mill Creek is an east-side tributary to Sacramento River at Mile 179.0L. Period of record 1948 to date. Records for 1955 [illegible]tely Division of Water Resources. Station washed out by high water December 19, 1955.

e Estimated

TABLE 43

FLOW OF ELDER CREEK AT GERBER - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47	47	23	23	98	12	0.2				0	15
2	45	43	22	22	94	12	0				0	15
3	40	38	21	21	91	9.5	0				0	10
4	36	36	21	20	87	8.5	0				0	10
5	35	35	19	19	84	6.2	0.1				0	90
6	32	33	18	17	101	5.4	0.1				0	300
7	30	32	18	16	125	5.1	0				0	84
8	29	30	19	16	128	4.2	0				0	47
9	33	29	24	16	115	4.0	0				0	151
10	38	29	45	16	103	3.7	0				0	58
11	37	27	43	16	94	4.0	0				0	32
12	32	26	37	16	84	4.5	0				0	26
13	29	26	35	16	73	7.5	0	N	N	N	6	23
14	29	25	32	15	65	5.1	0	0	0	0	10	18
15	33	25	29	15	56	5.1	0				8	15
16	43	26	26	16	50	4.5	0				10	17
17	37	35	24	16	47	3.3	0	F	F	F	15	55
18	158	35	23	16	42	2.9	0	L	L	L	25	1220
19	214	31	23	16	40	2.6	0	O	O	O	50	1060
20	155	29	21	21	38	2.1	0	W	W	W	200	1300
21	82	26	20	513	35	2.1	0				50	1850
22	63	25	20	482	31	2.1	0				20	5200
23	54	24	19	162	28	1.8	0				70	2560
24	50	23	19	113	27	1.3	0				40	928
25	46	23	19	116	25	0.8	0				30	534
26	45	23	19	225	22	1.0	0				20	523
27	41	30	19	136	20	0.8	0				20	411
28	40	25	23	110	18	0.7	0				22	314
29	38		26	103	16	0.1	0				20	248
30	40	—	26	113	14	0	0				15	218
31	45	—	24	—	12	—	0		—		—	206
Mean	54.1	29.9	24.4	80.7	60.1	4.1	0	0	0	0	21.0	662
Ac-Ft	3330	1660	1500	4800	3700	244	1	0			1250	40720

Maximum Discharge	Calender year 10400 c.f.s. December 22, 1955 of record 10400 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calender Yeer Water Yeer	57205 27615

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located 1.0 mile west of Gerber and 3.5 miles above the mouth. Elder Creek is a west-side tributary to the Sacramento River at Mile 178.5R. Drainage area is 142 square miles. Period of record 1949, to date. Records for 1955 computed by U. S. Geological Survey.
(Prior records are available at a site approximately 20 miles upstream.)

TABLE 44

FLOW OF THOMES CREEK AT PASKENTA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	654	180	122	219	282	134	29	5.0	1.0	1.8	4.4	101
2	420	164	115	200	385	124	28	4.7	1.2	1.8	4.4	99
3	310	167	110	175	442	119	28	4.2	.8	2.0	4.4	76
4	243	132	110	161	430	117	39	4.2	.6	2.0	4.7	63
5	210	134	105	150	480	127	36	4.2	.8	1.8	5.0	73
6	178	127	115	147	661	124	28	3.8	.7	1.8	5.0	830
7	161	127	117	150	728	115	23	3.8	.5	2.0	5.4	380
8	147	127	145	158	682	107	20	3.8	.5	2.0	5.8	233
9	145	137	184	160	605	99	20	3.3	.7	2.0	5.4	475
10	134	142	250	160	546	90	20	2.6	.3	2.4	5.4	266
11	119	145	230	150	510	84	20	2.6	.6	2.8	5.0	298
12	112	142	210	140	480	90	18	2.4	.5	2.8	5.0	357
13	112	142	190	140	415	78	16	2.4	.5	3.0	8.4	274
14	107	147	170	132	352	73	14	2.2	.8	3.0	11	230
15	110	150	160	132	306	67	14	2.0	1.0	3.0	10	200
16	120	187	150	140	278	65	12	2.0	1.3	2.8	14	310
17	130	310	140	150	270	59	12	1.8	1.3	2.8	15	482
18	150	254	134	160	298	51	12	1.6	1.8	2.8	25	1610
19	180	210	137	200	344	48	11	2.0	1.8	3.3	154	6050
20	170	187	137	450	375	45	11	2.0	2.6	4.4	755	3810
21	170	167	132	350	362	41	9.6	1.8	2.2	4.4	364	6150
22	170	155	124	270	314	40	9.0	1.6	2.0	4.4	137	16300
23	160	145	122	243	270	41	8.4	1.4	2.0	4.4	97	10700
24	160	137	125	310	240	41	7.8	1.4	1.8	4.4	76	4220
25	160	134	130	352	213	39	7.8	1.6	1.6	4.2	60	2410
26	150	134	140	322	194	37	7.3	1.4	1.6	4.4	63	1970
27	150	129	180	250	175	36	6.8	1.6	1.8	4.2	110	1490
28	140	112	266	250	164	35	6.8	1.6	1.8	4.2	139	1040
29	150		278	250	164	34	6.3	1.3	1.8	4.4	122	833
30	160	—	243	266	161	32	5.8	1.3	1.8	4.4	97	707
31	170	—	216	—	150	—	5.4	1.2	—	4.2	—	590
Mean	182	159	161	211	364	73.1	15.9	2.48	1.26	3.16	77.2	2020
Ac-Ft	11210	8810	9890	12570	22370	4350	976	152	75	194	4600	124200

Maximum Discharge	Calender year 23,500 c.f.s. December 21, 1955 of record 23,500 c.f.s. December 21, 1955	Total Runoff in Acre-Feet	Calender Year Water Year	199397 95488

U. S. Geological Survey and Division of Water Resources cooperative station located 0.5 mile upstream from Paskenta. Thomes Creek is a west-side tributary to Sacramento River at Mile 173.2R. Dreinage area is 188 squere miles. Period of record 1920 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 45

FLOW OF DEER CREEK NEAR VINA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	419	256	155	310	371	167	102	87	78	84	85	124
2	333	209	160	274	430	163	102	87	78	82	85	138
3	243	192	167	250	434	156	110	87	76	82	85	126
4	226	180	17[illegible]	227	434	154	110	85	76	82	87	118
5	194	175	15[illegible]	212	430	149	106	85	76	84	87	199
6	175	165	155	200	462	145	104	85	77	84	87	705
7	162	160	158	209	498	141	102	85	78	84	89	307
8	158	155	167	215	490	136	100	85	78	82	85	213
9	167	155	253	221	470	134	100	85	78	82	85	231
10	180	153	463	243	442	132	100	85	78	79	85	202
11	162	148	371	224	418	132	100	84	78	118	85	170
12	153	146	34[illegible]	212	406	130	100	84	78	93	85	165
13	150	144	318	209	394	143	98	84	78	87	100	156
14	146	144	281	209	352	138	95	84	82	85	102	145
15	150	146	246	194	320	134	95	82	93	85	93	138
16	189	153	224	189	294	130	93	80	87	85	106	143
17	178	163	212	242	278	124	93	84	85	84	104	250
18	356	186	203	251	272	120	93	80	110	85	102	1500
19	274	170	200	288	272	116	93	80	97	85	116	6530
20	224	167	192	571	272	114	91	80	89	85	259	4170
21	194	158	180	1230	275	112	91	80	85	85	375	3970
22	192	153	178	756	265	110	91	80	85	85	180	720
23	200	148	178	560	250	106	91	78	84	85	163	8430
24	200	144	186	542	241	106	91	78	85	85	134	4040
25	194	144	197	568	227	108	89	78	85	85	122	2200
26	189	160	206	502	216	108	89	78	82	91	116	4670
27	180	175	224	426	205	106	89	80	82	95	116	3060
28	175	153	337	410	192	106	89	80	94	97	116	1740
29	172		479	386	184	106	89	80	84	85	114	1210
30	186	—	415	362	182	106	89	78	84	85	112	940
31	206	—	333	—	177	—	89	78	—	85	—	822
Mean	203	165	242	358	328	126	95.9	82.0	83.0	86.5	119	1020
Ac-Ft	12510	9170	14900	21330	20180	7500	5900	5040	4940	5320	7100	112300

Maximum Discharge	Calendar year 12,500 c.f.s. December 22, 1955 of record 23,800 c.f.s. December 10, 1937	Total Runoff in Acre-Feet	Calendar Year 226450 Water Year 135310

U. S. Geological Survey and Division of Water Resources cooperative station located nine miles northeast of Vina and 0.8 mile upstream from a diversion dam. Deer Creek is an east-side tributary to Sacramento River at Mile 160.5L. Drainage area is 200 square miles. Period of record 1911 to 1915; 1920 to 1937; 1939 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 46

FLOW OF DEER CREEK AT HIGHWAY 99E - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	449	252	114	183	299	*4	3.0	1.2	1.4	2.0	18	*99
2	376	198	120	164	344	*40	3.0	0.7	1.2	3.4	18	*110
3	260	1[illegible]	122	134	353	*32	3.2	0.1	1.7	3.6	13	*101
4	211	164	132	114	362	*30	4.4	0.[illegible]	2.[illegible]	2.0	12	*65
5	188	158	122	96	344	*25	3.6	0.4	1.8	2.0	45	*160
6	174	152	117	83	376	*14	3.0	1.4	1.4	1.5	46	*570
7	152	144	117	72	412	*10	2.5	1.2	1.4	1.7	39	*302
8	147	142	120	61	406	*6.8	2.3	0.5	3.6	1.8	38	*171
9	145	142	171	64	376	*4.0	2.7	1.0	5.4	2.3	30	*125
10	202	140	438	74	348	*2.0	4.1	0.3	2.5	5.1	41	*162
11	158	132	344	72	317	*3.0	2.7	0.4	1.2	36	43	*136
12	144	132	294	66	290	*4.0	2.7	0.4	1.0	20	52	*132
13	142	132	237	66	252	*2.0	2.5	1.0	0.7	15	66	*125
14	140	130	198	66	195	*5.0	2.3	1.4	1.4	13	70	*120
15	140	132	164	56	155	*6.0	2.0	1.8	0.8	13	*74	*110
16	158	130	137	56	130	*6.9	2.3	0.4	1.0	20	*83	*120
17	168	152	127	87	117	6.7	2.7	0.7	0.3	19	*83	*200
18	444	161	107	142	104	6.4	1.2	0.5	1.7	18	*82	*1200
19	312	147	100	161	*05	6.1	1.7	0.7	1.2	27	*93	*5230
20	248	144	91	405	*97	6.1	2.3	1.4	0.7	32	*200	*3240
21	195	132	83	1040	*95	5.8	1.8	1.4	0.4	27	*300	*3150
22	180	120	83	705	*93	5.4	1.8	0.8	0.7	20	*144	*7780
23	165	98	78	498	*85	4.4	1.2	0.7	0.5	18	*131	*6750
24	192	100	75	468	*82	4.1	1.4	1.2	0.[illegible]	16	*107	*3230
25	180	98	72	445	*77	4.8	1.1	1.5	1.1	12	*98	*1760
26	177	104	75	454	*66	5.8	1.1	1.7	1.1	15	*93	*3740
27	164	127	83	368	*60	5.8	1.2	2.0	1.0	30	*93	*2470
28	161	114	114	330	*51	5.4	1.1	2.	1.4	20	*93	*1300
29	159		330	326	*47	5.1	1.7	1.7	1.5	19	*91	*770
30	161	—	317	317	*46	3.[illegible]	2.0	1.5	1.[illegible]	19	*90	*750
31	176	—	218	—	*46	—	2.[illegible]	1.4	—	19	—	*653
Mean	[illegible]	[illegible]	167	239	198	16.3	[illegible].3	1.[illegible]	1.4	[illegible].7	[illegible]	1486
Ac-Ft	16[illegible]0	[illegible].9	97[illegible]	14210	12[illegible]0	612	14[illegible]	62	85	901	4[illegible]0	9[illegible]0

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 153[illegible]5 Water Year 91[illegible]24

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located at the Highway 99 Bridge. Deer Creek is an east-side tributary to Sacramento River at Mile 168.5L. Period of record 1948 to date. Records for 1955 computed by Division of Water Resources. Station washed out by high water December 22, 1955.

* Estimated

TABLE 47

FLOW OF BIG CHICO CREEK NEAR CHICO - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	260	196	70	74	196	43	29	25	21	26	28	44
2	228	166	70	74	196	44	29	25	21	25	26	54
3	151	139	74	70	190	44	29	25	20	25	26	45
4	114	116	87	66	184	43	30	24	20	26	27	40
5	95	104	91	63	172	42	29	24	21	26	28	72
6	80	93	89	60	166	40	31	23	21	26	29	529
7	71	84	95	58	157	38	31	23	21	25	28	212
8	67	78	109	56	151	38	31	23	21	25	28	121
9	74	74	134	54	137	38	30	22	21	26	28	226
10	80	74	260	56	121	38	29	22	21	29	28	154
11	67	73	208	52	111	39	29	23	21	33	29	100
12	63	71	178	51	100	39	29	23	21	28	29	77
13	60	71	160	50	89	40	29	27	21	28	37	64
14	58	71	148	50	78	40	28	25	22	28	42	56
15	61	70	129	49	74	40	27	24	31	28	36	49
16	73	73	114	47	71	38	26	25	25	28	35	48
17	73	91	102	67	68	36	26	25	24	27	35	74
18	166	93	91	91	64	36	26	25	25	28	34	839
19	148	85	84	89	61	34	25	25	24	28	42	4310
20	119	78	78	206	59	34	25	24	22	28	78	2830
21	95	71	71	908	58	33	25	24	23	29	135	2300
22	87	67	67	792	57	31	25	23	22	29	56	5040
23	91	64	64	475	54	31	26	22	22	28	61	3700
24	95	61	61	384	53	31	26	22	22	28	48	1990
25	100	59	60	380	52	31	26	22	22	29	41	1180
26	107	70	60	349	51	31	26	22	22	30	38	2360
27	107	84	60	276	49	31	27	21	22	32	39	1850
28	107	71	70	250	47	31	27	20	22	30	39	1140
29	104		85	234	45	31	26	20	22	30	39	738
30	114	—	98	218	44	30	26	20	22	30	38	546
31	142	—	82	—	44	—	25	20	—	31	—	477
Mean	105	87.4	102	188	96.7	36.5	27.5	23.2	22.2	28.0	40.2	1009
Ac-Ft	6460	4850	6250	11200	5950	2170	1690	1420	1320	1720	2390	62010

Maximum Discharge	Calendar year 7150 c.f.s. December 22, 1955 of record 8260 c.f.s. December 10, 1937	Total Runoff in Acre-Feet	Calendar Year 107430 Water Year 53280

U. S. Geological Survey and Division of Water Resources cooperative station located six miles northeast of Chico. Big Chico Creek is an east-side tributary to Sacramento River at Mile 141.5L. Drainage area is 68.3 square miles. Period of record 1930 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 48

FLOW OF BIG CHICO CREEK NEAR MOUTH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	177	155	55	52	148	10	2.7				0	3.8
2	202	144	52	49	150	13	2.7				0	11
3	134	121	56	45	145	10	2.3				0	7.0
4	102	100	62	42	144	8.4	2.7				0	3.8
5	80	89	66	39	139	8.4	1.9				0	7.7
6	66	78	65	37	129	7.7	0				0	447
7	57	68	68	35	123	7.7	1.9				0	200
8	51	60	79	32	109	6.4	0				0	*98
9	60	56	92	24	96	13	0				0	*180
10	74	53	191	23	83	7.0	0				0	*123
11	55	52	181	19	72	8.4	0				0	*82
12	50	51	153	20	61	9.0	0				0	*62
13	45	49	131	20	50	9.0	0	N	N	N	0	*50
14	45	47	112	14	45	10	0	0	0	0	0	*44
15	50	46	97	6.4	42	10	0				0	*39
16	63	49	86	7.0	37	9.6	0				0.8	*39
17	63	60	80	14	33	6.4	0	F	F	F	3.4	*60
18	137	67	72	41	27	5.8	0	L	L	L	2.3	*670
19	132	65	62	41	22	5.1	0	O	O	O	3.4	*3450
20	114	57	57	93	20	4.4	0	W	W	W	11	*2250
21	90	53	52	536	15	3.8	0				41	*1830
22	83	49	46	655	15	3.4	0				21	*4050
23	82	46	41	365	13	14	0				19	*2950
24	85	43	41	280	13	3.8	0				19	*1600
25	85	42	38	264	13	1.1	0				8.4	*950
26	86	46	38	268	13	0	0				6.4	*1900
27	86	62	38	206	12	1.5	0				5.8	*1550
28	86	57	44	179	9.6	1.1	0				6.4	*900
29	83		51	169	9.6	0	0				4.4	*620
30	87	—	70	164	7.7	9.6	0				3.8	*455
31	103	—	58	—	7.7	—	0		—		—	*387
Mean	87.5	66.6	75.3	125	58.2	6.9	0.5	0	0	0	5.2	807
Ac-Ft	5381	3699	4629	7417	3577	412	28	0	0	0	310	49620

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 75073 Water Year 32706

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located approximately 1.5 miles above mouth. Big Chico Creek is an east-side tributary to Sacramento River at Mile 141.5L. Period of record 1948 to date. Records for 1955 computed by Division of Water Resources. Formerly published as Chico Creek.

* Estimated

TABLE 49

FLOW OF STONY CREEK BELOW BLACK BUTTE DAM SITE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	Merch	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	347	168	85	140	241	333	349	307	249	228	5.1	26
2	255	157	81	197	261	334	330	325	292	195	18	34
3	203	142	81	216	265	385	304	323	294	58	2.5	36
4	175	132	63	231	256	401	291	335	264	28	2.5	30
5	155	128	71	256	251	382	256	346	245	22	2.5	30
6	138	125	70	254	282	384	260	353	261	23	2.5	260
7	125	119	67	236	269	356	270	348	250	23	2.5	238
8	119	115	74	206	304	353	306	314	223	22	2.5	118
9	115	114	95	185	285	349	344	297	230	18	16	166
10	119	117	152	164	•265	294	363	299	259	18	22	142
11	109	114	144	156	250	324	370	292	250	21	18	106
12	101	112	125	142	324	337	364	283	252	20	6.9	114
13	96	111	119	117	332	263	356	284	260	17	5.8	102
14	93	111	112	103	321	221	339	279	250	11	5.1	86
15	91	111	103	95	294	237	331	273	235	7.7	2.5	78
16	103	112	91	107	269	284	326	282	208	8.7	2.5	72
17	98	128	83	114	222	306	317	276	175	16	2.5	118
18	191	134	77	92	193	368	292	269	158	43	2.5	658
19	210	123	73	84	230	398	316	293	169	44	2.5	6180
20	223	114	69	82	338	398	297	287	215	31	9.7	2730
21	164	111	66	212	371	392	310	282	202	12	76	2290
22	142	107	62	357	351	369	335	297	187	11	38	15600
23	134	103	62	218	339	342	326	283	212	11	24	12000
24	138	101	59	196	346	333	341	264	218	12	26	6050
25	138	95	60	203	360	338	339	243	215	14	20	3520
26	142	95	63	273	361	343	326	264	224	15	18	3230
27	138	104	67	210	341	324	298	267	227	7.9	18	2880
28	134	95	80	188	313	361	296	282	237	16	26	2080
29	134		102	215	307	373	282	296	240	2.5	30	1700
30	142	—	117	247	290	368	297	256	242	2.5	28	1530
31	166	—	107	—	307	—	302	248	—	2.5	—	1420
Mean	150	118	86.5	183	295	342	317	292	231	31.0	14.6	2052
Ac-Ft	9199	6541	5316	10900	18120	20330	19500	17940	13770	1906	869	126200

Maximum Discharge	Calendar year 19,300 c.f.s. December 22, 1955 of record 19,300 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year Water Year	250591 166726

Division of Water Resources and U. S. Bureau of Reclamation and U. S. Geological Survey cooperative station located below the proposed Black Butte Dam Site. The flows at this station are the sum of the flows as measured in Stony Creek below Orland South Diversion and in the Orland South Diversion Canal. Period of record 1953 to date. Records for January 1 through June 30, 1955 computed by Division of Water Resources and from July 1 through December 31 by the U. S. Geological Survey.
• Estimated

TABLE 50

FLOW OF STONY CREEK NEAR HAMILTON CITY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	450	137	59	0	164							0
2	332	141	56	0	168							0
3	240	130	49	0	160							0
4	•178	116	38	0	141							-
5	148	106	28	0	123							0
6	133	103	23	0	90							0
7	119	100	17	0	61							0
8	106	97	9.2	0	36							0
9	108	92	11	0	22							0
10	114	92	24	0	9.6							0
11	106	92	36	0	3.8							
12	97	90	24	0	1.2	N	N	N	N	N	N	
13	90	88	25	0	0.6	0	0	0	0	0	0	0
14	85	83	19	0	0.2							0
15	81	81	4.3	0	0							0
16	81	81	2.0	0	0							0
17	83	83	1.2	0	0	F	F	F	F	.	F	0
18	123	92	0.7	0	0	L	L	L	L	L	L	0
19	182	92	0.5	0	0	0	0	0	0	0	-	4130
20	261	85	0.4	0	0	W	W	W	W	W	W	5800
21	182	79	0.2	0	0							1740
22	141	68	0.1	178	0							13800
23	126	66	0	178	0							15900
24	119	68	0	141	0							9250
25	119	66	0	155	0							5050
26	119	65	0	250	0							4280
27	116	66	0	235	0							4090
28	114	66	0	178	0							2070
29	111		0	148	0							2220
30	111	—	0	148	0							1740
31	126	—	0	—	0	—			—		—	1540
Mean	145	90.2	13.8	53.7	31.6	0	0	0	0	0	0	4339
Ac-Ft	8930	5010	848	3200	1940	0	0	0	0	0	0	143800

Maximum Discharge	Calendar year 22,100 c.f.s. December 22, 1955 of record 37,500 c.f.s. March 1, 1941	Total Runoff in Acre-Feet	Calendar Year Water Year	163728 42804

U. S. Geological Survey and U. S. Army Corps of Engineers cooperative station located about five miles above the mouth and above the Glenn-Colusa Irrigation District canal crossing. The flow to the Sacramento River is cut off during irrigation season by an earth fill installed by Glenn-Colusa Irrigation District to transport water from their main canal across Stony Creek. Stony Creek is a west-side tributary to Sacramento River at Mile 138.0R. Water diverted from Stony Creek by G. C. I. D. in acre-feet amounted to: March 2, April 3200 and May 1940. Drainage area is 701 square miles. Period of record 1941 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 51

FLOW OVER MOULTON WEIR FROM SACRAMENTO RIVER TO BUTTE BASIN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12	N	N	N	N	N	N	N	N	N	N	N	0
13	O	O	O	O	O	O	O	O	O	O	O	0
14												0
15												0
16	F	F	F	F	F	F	F	F	F	F	F	0
17	L	L	L	L	L	L	L	L	L	L	L	0
18	O	O	O	O	O	O	O	O	O	O	O	0
19	W	W	W	W	W	W	W	W	W	W	W	0
20												3060
21												9550
22												2200
23												13500
24												21200
25												11900
26												3180
27												4520
28												6250
29												3950
30		—										2050
31		—		—		—			—		—	1250
Mean	0	0	0	0	0	0	0	0	0	0	0	2665
Ac-Ft	0	0	0	0	0	0	0	0	0	0	0	163900

Maximum Discharge	Calendar year 22,200 c.f.s. December 24, 1955	Total Runoff in Acra-Feet	Calandar Yaar Water Year	163900 0

Station is located on Sacramanto Rivar at Mile 104.0L. Elevation of crest is 76.75 U. S. E. D. datum; length of crest is 500 feet. Period of racord 1940 to date. Racords for 1955 computad by Division of Watar Rasources.

TABLE 52

FLOW OVER COLUSA WEIR FROM SACRAMENTO RIVER TO BUTTE BASIN - 1955

Date	Daily Maan Flow in Second-Feat											
	Jan.	Fab.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13	N	N	N	N	N	N	N	N	N	N	N	0
14	O	O	O	O	O	O	O	O	O	O	O	0
15												0
16												0
17	F	F	F	F	F	F	F	F	F	F	F	0
18	L	L	L	L	L	L	L	L	L	L	L	0
19	O	O	O	O	O	O	O	O	O	O	O	1800
20	W	W	W	W	W	W	W	W	W	W	W	22000
21												40800
22												28000
23												43500
24												57000
25												48700
26												33500
27												32500
28												38000
29												34000
30		—										28900
31		—		—		—			—		—	25200
Mean	0	0	0	0	0	0	0	0	0	0	0	14000
Ac-Ft	0	0	0	0	0	0	0	0	0	0	0	860600

Maximum Discharge	Calendar year 58,300 c.f.s. December 24, 1955	Total Runoff in Acra-Faet	Calendar Year Water Year	860600 0

Station is located on Sacramanto River at Mile 92.0L. Elavation of crest is 61.80 U. S. E. D. datum; length of crest is 1650 feet. Parlod of racord 1950 to data. Record for 1955 computad by Division of Water Rasources.

TABLE 53

FLOW OF BUTTE CREEK NEAR CHICO - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	736	383	252	360	475	315	180	133	140	124	106	191
2	518	333	252	350	505	305	168	136	129	131	106	220
3	362	289	247	340	531	300	168	136	124	147	103	167
4	323	261	242	330	557	290	168	140	133	135	103	159
5	299	266	242	320	584	290	168	129	136	143	106	189
6	275	233	219	310	648	281	164	123	143	103	112	856
7	256	242	237	310	678	276	168	123	123	118	106	425
8	247	228	252	300	662	268	176	117	136	124	106	295
9	266	237	303	300	648	263	153	117	126	147	109	430
10	285	224	437	300	605	254	153	120	129	124	92	330
11	266	237	388	290	591	258	160	120	126	159	103	272
12	242	224	372	280	577	245	153	120	140	115	109	215
13	224	242	357	280	564	245	157	117	129	100	127	232
14	228	237	343	270	531	240	160	120	136	100	143	215
15	237	233	323	270	493	232	143	120	135	100	127	203
16	266	252	299	265	469	232	160	133	135	109	131	203
17	256	309	289	350	451	218	146	140	135	97	147	305
18	404	304	285	430	451	214	143	133	135	100	127	1050
19	398	270	280	410	457	209	146	136	135	94	179	6150
20	328	261	266	600	463	204	160	136	135	112	330	5310
21	289	247	256	1280	469	209	143	129	135	112	390	4390
22	256	242	256	999	451	214	146	133	140	92	228	12000
23	252	233	256	685	428	204	146	123	140	90	228	9780
24	256	206	261	626	418	204	143	126	140	106	191	3860
25	252	206	266	640	390	196	143	133	140	92	175	2460
26	252	252	275	605	380	196	143	140	140	106	159	4990
27	256	275	289	524	370	180	143	133	140	121	155	3190
28	261	252	373	481	360	180	143	133	140	109	159	2020
29	247		449	475	345	188	140	140	140	106	159	1490
30	275	—	377	481	340	180	140	133	136	103	159	1210
31	309	—	360	—	335	—	136	126	—	103	—	1090
Mean	301	256	300	449	491	236	154	129	135	114	152	2071
Ac-Ft	18490	14240	18450	26700	30200	14060	9440	7930	8040	6990	9070	126700

Maximum Discharge	Calendar year 18,700 c.f.s. December 22, 1955 of record 18,700 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year 290310 Water Year 186260

U. S. Geological Survey and Division of Water Resources cooperative station located 0.8 mile downstream from Little Butte Creek and 7.5 miles east of Chico. Butte Creek is a tributary to Butte Slough 0.6 mile above its junction with the Sacramento River. Flows into the Sacramento River are regulated by gates at the mouth of Butte Slough. (See notes on Tables 54 and 65). Drainage area of Butte Creek near Chico is 148 square miles and period of record 1930 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 54

FLOW OF BUTTE SLOUGH TO SACRAMENTO RIVER - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	553	319	174	656	456	57	19	94	144	0	488
2	0	170	328	149	684	482	63	22	140	153	0	0
3	213	531	393	118	644	488	45	38	171	154	0	0
4	417	593	369	112	500	355	37	41	190	107	0	0
5	417	604	408	71	545	345	24	17	208	72	0	0
6	384	535	427	0	526	359	31	0	233	68	0	0
7	379	500	431	40	538	359	23	0	300	67	0	0
8	364	504	427	32	499	322	12	0	324	69	0	0
9	359	469	548	11	464	271	8.1	0	350	72	0	678
10	225	431	610	30	518	233	0	3.6	380	77	0	323
11	242	408	593	5.7	367	139	0	18	395	80	0	821
12	544	408	561	0	237	99	0	18	406	80	0	1110
13	638	374	565	0	210	129	0	30	434	90	0	1100
14	616	287	535	0	293	115	0	36	431	95	724	1050
15	610	254	527	0	439	112	0	39	451	100	364	958
16	570	249	491	0	506	169	0	67	583	100	303	832
17	389	254	455	0	423	242	0	58	584	100	270	610
18	478	254	446	0	411	247	0	47	565	87	354	0
19	0	196	441	69	532	243	0	63	596	80	408	0
20	0	225	523	98	600	241	0	71	639	79	450	0
21	0	249	215	215	584	210	0	91	0	81	0	0
22	339	259	222	0	566	138	0	114	519	80	0	0
23	735	249	214	0	525	54	0	119	433	84	0	0
24	775	270	160	504	520	51	0	104	406	86	422	0
25	752	282	91	730	557	29	0	102	355	89	86	0
26	770	282	95	752	637	6.6	0	103	296	59	398	0
27	849	265	94	544	585	13	0	108	230	0	369	0
28	798	303	95	735	575	17	0	85	199	0	349	0
29	752		103	804	518	33	0	69	140	0	339	0
30	735	—	118	809	517	38	0	68	140	0	303	0
31	667	—	130	—	483	—	9.3	68	—	0	—	0
Mean	456	356	353	200	505	200	10.0	52.2	360	75.9	171	257
Ac-Ft	27800	19750	21690	11910	31060	11900	614	3210	21410	4670	10190	15810

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 180611 Water Year 223044

This is discharge from Butte Slough to Sacramento River at Mile [illegible] and is measured at and regulated by the gravity culverts at the mouth of the slough. These flows, together with those shown in Tables [illegible] and 65, are, during the summer months, made up almost entirely of return water from lands irrigated by Feather River diversions. Discharge from the Sacramento to the Butte Basin over Moulton and Colusa Weirs is shown in Tables 51 and 52. Period of record 1924 to date. Records for 1955 computed by Division of Water Resources

TABLE 55

FLOW OF RECLAMATION DISTRICT 70 DRAIN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13	18	8.8	19	36	48	51	53	48	12	*11	20
2	16	18	0	21	40	49	41	54	78	12	*11	11
3	16	0	16	22	53	44	43	54	73	12	*11	7.7
4	9.6	14	0	23	116	43	60	49	73	16	*11	17
5	0	15	28	34	102	37	65	42	70	16	*11	7.7
6	16	0	0	30	116	36	59	43	78	16	*11	5.4
7	0	16	0	28	102	30	51	44	160	*12	*11	0
8	14	13	0	19	71	34	49	49	129	*12	*11	0
9	0	11	38	20	30	31	45	53	110	*12	*4.8	0
10	15	11	0	30	35	21	48	52	113	12	*4.8	0
11	15	0	0	31	28	19	54	52	0	12	*4.8	0
12	18	15	16	30	28	14	54	51	0	8.2	*4.8	0
13	5.0	0	12	30	52	33	54	59	112	12	*4.8	0
14	3.8	15	0	0	52	28	51	57	113	12	*4.8	0
15	10	0	24	0	50	27	49	56	101	12	4.8	0
16	18	14	15	0	55	27	51	56	98	12	..8	11
17	12	11	12	19	76	33	48	56	111	8.2	16	11
18	40	18	13	18	60	20	48	50	86	*5.8	0	0
19	30	0	8.8	110	25	20	51	[illegible]	81	*5.8	0	0
20	30	0	8.8	30	15	32	53	59	86	*5.8	11	119
21	9.2	0	10	24	25	27	66	61	64	*5.8	4.8	134
22	33	15	11	45	16	23	60	60	54	*5.8	0	109
23	30	0	12	50	16	24	61	70	41	*5.8	0	154
24	25	13	13	36	16	26	60	73	30	8.2	0	164
25	19	0	13	30	16	21	48	64	24	8.2	2.5	151
26	15	0	13	41	16	21	49	82	30	*5.8	0.6	164
27	15	15	14	38	29	20	50	84	24	*5.8	0	175
28	15	0	14	16	40	23	52	77	16	*5.8	16	136
29	15		14	22	41	19	55	70	24	*5.8	0	95.6
30	16	—	14	36	43	32	56	74	16	*5.8	57	87
31	8.8	—	11	—	52	—	58	74	—	*5.8	—	13
Mean	15.6	8.3	10.9	28.4	46.8	28.7	52.9	59.4	68.0	9.5	7.8	51.4
Ac-Ft	957	460	673	1690	2880	1710	3253	3652	4052	584	465	3158

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	23534
			Water Year	21800

This is the drainage from Reclamation District 70 returned to the Sacramento River at Mile 68.6L. This plant discharges both to the Sacramento River and to an irrigation canal and is a combination irrigation and drainage plant. The above flow includes gravity as well as pumped drainage. Period of record 1924 to date. Records for 1955 computed by Division of Water Resources.

* Estimated

TABLE 56

FLOW OVER TISDALE WEIR FROM SACRAMENTO RIVER TO SUTTER BY-PASS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13	N	N	N	N	N	N	N	N	N	N	N	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15												0
16												0
17	F	F	F	F	F	F	F	F	F	F	F	0
18	L	L	L	L	L	L	L	L	L	L	L	0
19	0	0	0	0	0	0	0	0	0	0	0	375
20	W	W	W	W	W	W	W	W	W	W	W	10000
21												14700
22												15900
23												18900
24												21000
25												20800
26												19800
27												18400
28												18900
29												18400
30		—										17300
31		—		—		—			—		—	16200
Mean	0	0	0	0	0	0	0	0	0	0	0	6796
Ac-Ft	0	0	0	0	0	0	0	0	0	0	0	417900

Maximum Discharge	Calendar year 21,200 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year	417900
			Water Year	19016

Station is located on Sacramento River at Mile 64.2L. Elevation of crest is 45.45 U.S.E.D. datum; length of crest is 1195 feet. Period of record 1940 to date. Record for 1955 computed by Division of Water Resources.

TABLE 57

FLOW OF RECLAMATION DISTRICT 108 DRAIN AT ROUGH AND READY BEND - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	50	53	44	346	279	313	362	400	95	0	27
2	70	58	43	0	298	274	312	362	390	0	0	0
3	98	48	21	36	300	270	347	360	431	32	0	34
4	20	50	0	27	406	268	439	322	511	0	0	0
5	26	26	44	0	379	198	310	352	473	44	0	0
6	37	0	0	28	357	296	312	374	427	0	0	40
7	31	61	32	58	301	267	367	367	410	35	34	38
8	26	58	0	40	335	185	305	358	388	0	0	0
9	33	48	0	18	373	282	323	364	410	0	0	32
10	57	40	0	82	366	297	323	406	384	32	0	38
11	0	34	0	48	366	297	264	392	409	43	20	0
12	62	26	40	36	378	297	304	390	347	0	0	25
13	64	0	0	32	404	297	328	377	318	40	0	0
14	61	47	55	43	435	297	328	455	303	0	0	32
15	46	37	0	49	597	297	326	371	116	39	0	0
16	70	45	29	72	412	297	326	396	304	0	20	57
17	38	25	52	85	458	298	326	428	292	35	0	0
18	53	25	57	131	463	293	326	432	255	0	34	31
19	163	25	56	115	480	298	326	415	201	35	0	372
20	26	0	25	26	456	297	327	423	199	0	0	386
21	29	25	28	271	476	295	328	505	109	33	27	338
22	30	0	39	280	660	293	328	431	161	0	0	366
23	56	0	20	234	423	203	328	364	81	0	69	470
24	44	0	0	288	442	295	407	390	150	21	0	513
25	46	27	36	217	454	292	377	384	96	0	0	382
26	45	0	18	261	458	169	327	382	49	23	0	368
27	61	0	0	278	458	298	370	381	43	0	0	423
28	61	57	44	252	448	297	365	440	64	0	29	306
29	49		0	240	375	330	369	379	76	0	0	171
30	68	—	43	247	215	332	370	360	0	0	0	126
31	46	—	0	—	279	—	438	399	—	0	—	45
Mean	48.9	29	23.7	118	406	280	342	391	260	16.4	7.8	149
Ac-Ft	3007	1611	1458	7018	24990	16650	21020	24040	15470	1006	462	9163

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 125895 Water Year 126268

This is the drainage from Reclamation District 108 discharged to the Sacramento River at Mile 44.0R. Additional drainage from Reclamation District 108 is sometimes discharged to Back Borrow Pit at Mile 19.9L. Period of record 1924 to date. Records for 1955 computed by Division of Water Resources.

TABLE 58

FLOW OF RECLAMATION DISTRICT 787 DRAIN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15	Records sufficient to compute only monthly flows.											
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30		—										
31		—		—		—			—		—	
Mean	10.4	4.5	1.4	13.4	24.8	16.8	19.6	21.9	13.4	0.3	0	46.4
Ac-Ft	641	250	89	799	1523	1000	1207	1349	799	20	0	2855

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 10532 Water Year 8551

This is the drainage from Reclamation District 787 discharged by pumping to the Sacramento River at Mile [illegible] R. Additional drainage from Reclamation District 787 is discharged to the Back Borrow Pit below the Knights Landing Outfall Gates via Sycamore Slough. (See Table 33). Period of record 1949 to date. Records for 1955 computed by Division of Water Resources.

TABLE 59

FLOW OF COLUSA TROUGH AT HIGHWAY 20 - 1955

Data	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	227	198	106	307	915	621	669	735	1120	302	381	178
2	228	184	106	357	955	643	651	699	1220	350	399	159
3	225	172	103	401	945	601	651	689	1270	381	397	145
4	213	159	102	359	893	669	681	711	1330	383	417	153
5	201	171	98	312	857	703	697	711	1410	366	393	145
6	200	159	90	223	793	631	647	717	1530	309	390	257
7	205	150	90	254	747	533	621	797	1640	291	375	318
8	201	147	92	273	877	345	595	807	1700	302	350	225
9	235	147	103	302	955	361	567	719	1710	327	347	459
10	401	151	108	206	939	341	613	691	1670	372	339	483
11	508	147	97	284	859	318	675	755	1430	402	348	329
12	489	142	100	282	957	413	687	789	1240	311	348	285
13	451	142	102	139	1030	442	661	807	1170	312	472	254
14	415	135	103	97	1160	447	679	785	1080	347	781	232
15	375	137	96	86	1130	483	693	769	971	341	556	205
16	345	131	82	57	1130	565	611	767	905	348	374	210
17	314	131	79	102	1280	597	629	841	823	345	383	203
18	424	124	67	232	1400	569	617	915	707	321	366	338
19	510	120	64	318	1400	611	641	849	601	336	334	1690
20	483	115	53	384	1300	647	687	893	559	370	345	2570
21	433	114	58	775	1220	601	675	861	487	383	339	2760
22	348	114	60	1170	1050	527	687	873	474	399	318	2950
23	303	114	68	1180	885	485	691	879	476	415	300	3230
24	291	112	139	955	677	476	735	857	442	426	388	3390
25	271	112	118	857	550	459	689	857	419	393	356	3300
26	246	109	139	1200	538	466	647	883	381	393	302	3170
27	222	114	167	1130	643	550	629	927	348	393	262	3150
28	203	109	269	957	669	617	677	957	345	388	239	3080
29	194		276	907	677	597	715	1030	296	395	225	2950
30	188	—	296	889	665	637	739	1030	276	388	193	2740
31	189	—	316	—	637	—	731	1040	—	404	—	2460
Mean	308	138	121	500	927	532	664	827	934	361	367	1355
Ac-Ft	18920	7656	7432	29740	56990	31650	40830	50860	55600	22200	21850	83340

Maximum Discharge	Calendar year 3410 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year 427068 Water Year 400828

Division of Water Resources station located 37.0 miles above the mouth of Back Borrow Pit of Reclamation District 108. This station is also known as Colusa Trough at Tahoe-Ukiah Highway and Colusa Trough at Colusa Williams Highway. The flow is return water flowing in the main drain of Reclamation District 2047; it is drainage chiefly from lands irrigated by Glenn-Colusa, Provident, Princeton-Codora-Glenn, Compton-Delevan, Maxwell, and Jacinto Irrigation District. Flow reaches Sacramento River, at Mile 34.15R, through the Knights Landing Outfall Gates via Back Borrow Pit, (see Table 62). Period of record 1924 to date. Formerly published as Colusa Trough at Colusa-Williams Highway.

TABLE 60

FLOW OF BACK BORROW PIT (COLUSA TROUGH) NEAR COLLEGE CITY - 1955

Data	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	239	192	116	381	926	717	616	784	1210	331	362	163
2	236	189	114	428	994	688	622	749	1320	368	360	145
3	239	172	116	451	1040	685	601	726	1370	386	370	118
4	234	161	112	434	984	669	625	736	1460	392	389	114
5	219	159	104	395	922	733	650	739	1510	412	378	100
6	212	163	96	297	878	662	628	710	1590	339	368	165
7	214	154	88	222	781	583	577	790	1690	334	373	264
8	204	143	96	265	882	381	553	831	1780	339	334	182
9	209	148	114	344	1020	342	493	807	1810	389	321	321
10	329	159	134	266	1070	347	535	723	1830	389	331	490
11	496	163	120	339	922	318	616	755	1760	456	318	426
12	517	152	112	378	970	368	659	807	1590	400	326	323
13	496	152	120	256	1120	431	682	848	1480	368	360	246
14	434	145	134	124	1240	428	631	878	1380	375	678	224
15	378	145	122	96	1280	479	675	844	1260	360	589	202
16	352	145	108	65	1260	568	604	810	1140	355	384	204
17	331	141	86	8.0	1370	610	628	851	1040	347	349	189
18	426	132	92	58	1460	592	637	970	926	326	357	*264
19	675	120	79	244	1500	604	650	922	774	334	321	*1500
20	473	110	81	279	1430	610	701	950	720	362	310	*2500
21	437	118	77	656	1360	586	691	946	610	381	316	*2850
22	373	116	85	1170	1240	526	717	946	535	378	310	*3350
23	360	118	72	1310	1040	465	701	967	535	381	284	*3600
24	398	116	100	1120	844	417	762	970	529	406	323	*3700
25	389	116	266	962	666	389	723	946	505	375	339	*3600
26	308	112	234	1070	580	381	666	967	462	362	282	*3500
27	246	128	236	1160	675	462	628	1020	417	365	242	*3320
28	212	126	336	997	739	604	646	1100	395	370	219	*3180
29	196		362	946	765	580	707	1130	381	381	202	*3080
30	186	—	375	854	758	616	758	1190	334	373	182	*2900
31	184	—	423	—	704	—	787	1200	—	378	—	*2700
Mean	329	143	152	519	1014	528	651	891	1078	371	343	1417
Ac-Ft	20240	7936	9342	30890	62320	31420	40000	54770	64150	22830	20380	87110

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 451388 Water Year 433408

Division of Water Resources station located on Back Borrow Pit of Reclamation District 108 at Mile 22.7. This is return water derived chiefly from lands irrigated by Glenn-Colusa, Provident, Princeton-Codora-Glenn, Compton-Delevan, Maxwell, and Jacinto Irrigation Districts. Period of record 1946 to 1952 and 1954 to date.

* Estimated.

TABLE 61

FLOW OF RIDGE CUT AT KNIGHTS LANDING - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	[illegible]		•1.8	•69	•76	•96	•114	•87	•34		[illegible]	0
2	6		•1.8	•69	•76	•96	•114	•87	•34		0	0
3	16		•1.8	•69	•76	•96	•114	•87	•34		0	0
4	36		•1.8	•69	•76	•96	•114	•87	•34		0	0
5	48		•1.8	•69	•76	•96	•114	•87	•34		0	0
6	28		•1.8	•69	•76	•96	•114	•87	•34		0	0
7	7.2		•1.8	•69	•76	•96	•114	•87	•34		0	0
8	0		•1.8	•69	•76	•96	•114	•87	•34		0	0
9	0		•1.8	•69	•76	•96	•114	•87	•33		0	18
10	0		•1.8	•69	•76	•96	•113	•87	•33		0	59
11	7.6		•1.8	•69	•76	•96	•113	•87	•33		0	130
12	39		•1.8	•69	•76	•96	•113	•87	•33		0	51
13	35	N	•1.8	•69	•76	•96	•113	•87	•33	N	0	3.0
14	18	O	•1.8	•69	•76	•96	•113	•87	•33	O	0	0
15	4.5		•1.8	•69	•76	•96	•113	•87	•33		0	0
16	0		•1.9	•69	•76	•96	•113	•88	•33		0	0
17	18	F	•1.9	•69	•76	•96	•113	•88	•33	F	0	0
18	52	L	•1.9	•70	•76	•96	•113	•88	•33	L	0	0
19	172	O	•1.9	•70	•76	•96	•113	•88	•33	O	0	36
20	462	W	•1.9	•70	•76	•96	•113	•88	•33	W	0	•82
21	514		•1.9	•70	•76	•96	•113	•88	•33		0	•218
22	504		•1.9	•70	•76	•96	•113	•88	•33		0	•670
23	450		•1.9	•70	•76	•96	•113	•88	•33		14	•3570
24	227		•1.9	•70	•76	•96	•113	•88	•33		8.2	•3900
25	112		•1.9	•70	•76	•96	•113	•88	•33		0	•2700
26	59		•1.9	•70	•76	•96	•113	•88	•33		0	•3800
27	35		•1.9	•70	•76	•96	•113	•88	•33		0	•4560
28	7.9		•1.9	•70	•76	•96	•113	•88	•33		0	•5000
29	0		•1.9	•70	•76	•96	•113	•88	•33		0	•4700
30	0	—	•1.9	•70	•76	•96	•113	•88	•33		0	•3850
31	0	—	•1.9	—	•76	—	•113	•88	—		—	•3000
Mean	93.0	0	1.8	69.4	76	96	113	87.5	33	C	[illegible]	11 2
Ac-Pt	5657	0	114	4132	4673	5712	6966	5381	1980	0	[illegible]	2090

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year / Water Year	[illegible] / 59329

Knights Landing Ridge Cut diverts water from the Back Borrow Pit of Reclamation District 108, at a point above the outfall gates, into the Yolo By-Pass above Elkhorn. Winter flows are uncontrolled. Summer flows for irrigation are controlled at the outfall gates and at the junction with Yolo By-Pass by weir boards and gates. Period of record 1933 to date. Records for 1954 computed by Division of Water Resources.

• Estimated

TABLE 62

FLOW OF COLUSA BASIN DRAINAGE TO SACRAMENTO RIVER AT KNIGHTS LANDING - 1 55

Data	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	122	214	147	[illegible]	666	615	528	[illegible]	[illegible]	[illegible]	[illegible]	227
2	0	199	149	423	532	[illegible]	52	692	1450	[illegible]	[illegible]	[illegible]
3	0	224	155	459	992	564	520	665	1330	[illegible]	438	[illegible]
4	0	376	153	[illegible]	1020	564	520	665	1430	[illegible]	[illegible]	153
5	52	243	149	342	944	570	520	665	1550	471	[illegible]	[illegible]
6	540	212	140	191	870	564	524	660	1630	438	467	139
7	[illegible]	188	147	204	706	516	520	660	1630	[illegible]	475	58
8	[illegible]	165	147	[illegible]	618	324	512	67[illegible]	[illegible]	378	[illegible]	0
9	372	165	[illegible]	120	620	96	[illegible]	762	1830	[illegible]	[illegible]	0
10	346	159	[illegible]	[illegible]	976	6.6	372	737	[illegible]	[illegible]	[illegible]	203
11	[illegible]	170	[illegible]	152	918	54	[illegible]	650	1910	508	[illegible]	[illegible]
12	634	177	100	130	775	80	[illegible]	660	e1830	[illegible]	[illegible]	702
13	636	174	114	199	827	170	52	67[illegible]	e1710	[illegible]	[illegible]	602
14	[illegible]	165	131	[illegible]	[illegible]	220	[illegible]	754	e1670	[illegible]	[illegible]	367
15	[illegible]	141	143	25	[illegible]	224	[illegible]	[illegible]	e1520	[illegible]	[illegible]	306
16	[illegible]	137	[illegible]	0	[illegible]	[illegible]	[illegible]	792	e14[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	143	[illegible]	0	[illegible]	[illegible]	[illegible]	730	e.250	[illegible]	[illegible]	312
18	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	792	e1130	[illegible]	[illegible]	[illegible]
19	77	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	e1050	[illegible]	[illegible]	[illegible]
20	0	133	[illegible]	[illegible]	153	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0
21	[illegible]	137	83	[illegible]	[illegible]	[illegible]	580	917	[illegible]	[illegible]	[illegible]	0
22	[illegible]	135	32	[illegible]	[illegible]	[illegible]	[illegible]	826	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	135	[illegible]	[illegible]	e1050	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	122	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	—	[illegible]	—	[illegible]	—	[illegible]	[illegible]	—	—	—	[illegible]
Mean	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ac-Pt	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year / Water Year	[illegible] / [illegible]

This is the drainage from Colusa Basin passing down the Back Borrow Pit of Reclamation Districts [illegible] and [illegible] and entering the Sacramento River at Mile [illegible].15R, just above the Knights Landing gaging station. Flows are controlled at the Knights Landing outfall gates and a portion of the flow of the Back Borrow Pit is diverted to the Knights Landing Ridge Cut, (see Table 61). Total flow to Sacramento River is sum of Tables 2 and 3. Period of record is 1924 to date. Records for 1955 computed by Division of Water Resources.

• Estimated.

TABLE 63

FLOW OF SYCAMORE SLOUGH NEAR KNIGHTS LANDING - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15	Records sufficient to compute only monthly flows.											
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30		—										
31		—		—		—			—		—	
Mean	3.3	2.1	1.0	21.7	24.7	18.4	21.6	26.4	14.6	0.8	0.4	21.9
Ac-Ft	206	114	60	1292	1517	1095	1330	1622	870	51	25	1349

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	9531
			Water Year	8410

This water is discharged from Reclamation District 787 by pumping into Colusa Basin Drain below the outfall gates and is not included in the flow shown in Table 62. Daily distribution of flows are not available since the plant operates on an automatic float switch. See Table 58 for additional drainage from Reclamation District 787. Period of record 1940 to date. Records for 1955 computed by Division of Water Resources.

TABLE 64

FLOW OVER FREMONT WEIR FROM SACRAMENTO RIVER TO YOLO BY-PASS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13	N	N	N	N	N	N	N	N	N	N	N	0
14	O	O	O	O	O	O	O	O	O	O	O	0
15												0
16												0
17	F	F	F	F	F	F	F	F	F	F	F	0
18	L	L	L	L	L	L	L	L	L	L	L	0
19	O	O	O	O	O	O	O	O	O	O	O	0
20	W	W	W	W	W	W	W	W	W	W	W	1830
21												46900
22												97200
23												256000
24												151000
25												106000
26												141000
27												149000
28												153000
29												133000
30		—										99800
31		—		—		—			—		—	73500
Mean	0	0	0	0	0	0	0	0	0	0	0	45430
Ac-Ft	0	0	0	0	0	0	0	0	0	0	0	2793000

Maximum Discharge	Calendar year 293,800 c.f.s. December 23, 1955 of record 236,000 March 1, 1940 & February 8, 1942	Total Runoff in Acre-Feet	Calendar Year	2793000
			Water Year	0

Station is located on Sacramento River at Mile 23.0R. Elevation of crest is 33.5 U.S.C.&G.D. datum; length of crest is 9120 feet. Period of record 1944 to date. Records for 1955 computed by Division of Water Resources.

TABLE 65

FLOW OF BUTTE SLOUGH TO SUTTER BY-PASS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	*296	290	151	181	301	188	230	167	141	20	206	40
2	*808	*376	138	142	271	206	201	169	142	27	206	154
3	*801	*307	110	144	220	186	200	175	138	26	204	181
4	538	*166	89	139	203	164	203	158	138	23	198	184
5	430	*137	73	134	189	183	189	156	134	18	195	184
6	375	*128	62	145	204	195	211	151	140	11	194	172
7	332	*128	58	171	198	163	182	158	140	11	198	254
8	298	*127	54	150	198	171	183	174	140	13	201	641
9	277	*127	72	171	186	165	176	175	145	19	192	845
10	319	*124	103	165	182	159	174	177	142	29	187	737
11	498	117	117	138	171	158	173	173	139	40	179	725
12	533	110	119	144	176	161	182	168	135	41	180	329
13	461	101	116	134	174	156	176	179	133	56	199	329
14	413	115	107	118	187	145	165	177	125	58	153	258
15	385	122	93	111	198	149	162	175	127	50	36	204
16	392	121	77	134	197	153	161	155	138	44	22	153
17	533	124	65	139	173	153	157	134	123	41	18	114
18	710	130	59	158	185	158	159	131	118	25	23	197
19	1210	141	55	188	212	163	151	134	113	14	33	825
20	1460	137	50	167	208	163	150	131	114	11	55	2420
21	1550	129	89	191	198	157	155	139	104	14	75	10700
22	1500	124	108	338	183	157	149	138	82	16	278	35700
23	1240	116	99	905	188	182	146	133	54	20	341	43600
24	1050	117	94	717	188	180	159	135	*37	22	178	70200
25	879	113	123	419	185	185	171	130	*25	26	146	81500
26	734	110	136	326	179	187	164	142	*22	42	122	71200
27	518	108	134	451	183	223	151	140	16	125	65	58900
28	423	128	129	492	176	225	150	126	8.2	172	44	57000
29	363		131	379	177	233	155	133	6.4	192	37	52700
30	323	—	144	315	183	233	167	137	7.8	202	29	45600
31	294	—	179	—	174	—	174	141	—	203	—	38800
Mean	645	145	101	250	195	177	172	152	101	52.0	140	18830
Ac-Ft	39680	8079	6216	14890	12000	10550	10560	9356	6005	3195	8319	1158000

Maximum Discharge	Calendar year 84,400 c.f.s. December 25, 1955	Total Runoff in Acre-Feet	Calendar Year	1288850
			Water Year	101197

This is discharge from Butte Slough to Sutter By-Pass. During low flow periods gates at mouth of slough are regulated (Table 54) which forces water under Long Bridge as shown in this table. Normal summer flows are primarily from Feather River sources. During flood periods Sacramento River water enters Butte Basin above Butte City by bank spill and over Moulton and Colusa Weirs. The purpose of the summer regulation is to make water available for use on Sutter By-Pass lands (below Long Bridge) and Butte Slough Irrigation Company in Reclamation District 70. Period of record 1939 to date. Records for 1955 computed by Division of Water Resources.

* Estimated

TABLE 66

FLOW OF WADSWORTH CANAL TO SUTTER BY-PASS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	60	74	41	83	120	180	70	45	81	116	60	27
2	58	69	41	65	132	168	75	52	74	122	55	27
3	55	67	38	48	134	183	67	50	91	126	53	26
4	*52	62	36	93	127	215	62	62	100	*70	56	22
5	*48	62	34	48	91	204	76	51	120	*68	59	27
6	*46	61	35	44	77	190	102	62	120	*72	52	70
7	43	58	17	53	72	178	86	59	151	*72	55	60
8	41	56	26	55	62	142	60	*59	*117	*70	47	52
9	53	56	34	68	74	129	48	*52	*110	*60	56	85
10	105	56	33	115	87	113	43	*50	*145	*71	79	62
11	78	55	32	108	98	132	38	*51	*197	*107	83	58
12	71	53	32	88	100	170	57	*52	*256	62	83	52
13	70	52	33	75	132	153	63	*55	*246	57	126	48
14	64	50	31	96	194	145	46	*57	236	59	112	47
15	99	48	32	76	137	135	30	*60	240	54	59	48
16	122	48	33	53	127	135	14	*55	248	62	49	47
17	94	46	36	60	176	146	20	*18	236	*36	43	55
18	236	43	36	50	210	146	32	12	204	*70	41	90
19	223	41	35	54	*192	145	40	23	194	*22	34	650
20	189	41	34	66	*175	124	44	48	171	*102	33	1160
21	143	41	12	168	158	110	53	75	173	*220	30	1330
22	124	38	9.6	194	192	90	55	62	151	*189	*32	1120
23	111	39	12	129	195	93	54	43	145	*199	*34	1030
24	103	39	11	110	180	104	61	53	145	*192	*34	*946
25	95	39	3.8	120	176	90	43	93	148	*147	*34	*616
26	91	38	4.0	138	185	93	32	88	134	*156	33	*1030
27	86	46	11	114	204	87	38	88	147	*64	33	*962
28	82	43	12	120	180	55	57	114	118	60	31	*665
29	79		19	106	180	47	57	129	118	62	29	*488
30	78	—	54	106	204	61	60	148	126	66	26	*349
31	76	—	40	—	232	—	26	129	—	61	—	*507
Mean	92.7	50.8	27.9	90.1	148	132	51.9	64.4	158	93.4	51.7	379
Ac-Ft	5702	2810	1713	5361	9130	7860	3191	3957	9406	5740	3076	23320

Maximum Discharge	Calendar year 1300 c.f.s. December 21, 1955	Total Runoff in Acre-Feet	Calendar Year	81275
			Water Year	68480

This is the discharge (measured at Weir #4) to the East Borrow Pit of the Sutter By-Pass at Mile 10.5 (north from Chandler). This flow is made up primarily of Feather River drainage or return flows. This flow and flow from Butte Slough (Table 65) makes up the entire Feather River contribution to the Sutter By-Pass. Period of record 1939 to date. Records for 1955 computed by Division of Water Resources.

e Estimated

TABLE 67

FLOW OF RECLAMATION DISTRICT 1500 DRAIN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	64	64	72	160	513	1250	1190	1070	97	46	0
2	156	64	64	41	147	513	1190	1160	1040	180	45	0
3	63	64	0	49	228	574	1100	1130	937	43	41	0
4	124	97	0	55	163	513	1100	1100	937	0	37	0
5	64	65	0	36	228	513	1100	1100	571	0	42	0
6	64	128	117	48	163	445	1100	1100	510	0	37	64
7	64	65	0	48	153	513	1100	1100	581	0	36	0
8	116	65	0	46	437	513	1040	1100	581	213	38	126
9	152	65	176	50	287	445	1070	1100	445	128	33	0
10	176	130	64	74	284	513	1160	1100	513	95	36	0
11	188	130	0	27	285	734	1130	1100	574	96	31	152
12	152	116	0	63	286	862	1130	1100	574	94	34	0
13	0	52	84	34	287	937	1130	1130	574	67	36	0
14	128	64	0	72	288	973	1160	1100	513	66	35	96
15	128	120	0	4.0	418	1010	1130	1100	513	95	33	0
16	204	64	65	16	226	936	1190	1130	574	92	32	96
17	168	64	65	0	317	937	1130	1130	367	93	36	0
18	256	64	65	0	357	973	1160	1070	673	75	8.0	132
19	346	0	0	0	317	1010	1130	1130	443	71	0	573
20	290	64	0	121	314	1040	1160	1130	423	83	91	783
21	239	0	0	59	357	1100	1130	1160	391	60	26	722
22	262	65	0	98	525	1130	1130	1220	354	75	12	708
23	164	64	0	118	288	1190	1130	1190	287	65	0	831
24	192	64	14	59	356	1250	1100	1220	289	57	86	855
25	128	64	57	275	356	1330	1130	1220	268	82	0	700
26	128	64	0	165	357	1380	1190	1220	226	72	0	1010
27	160	120	59	0	357	1350	1250	1190	210	56	88	928
28	128	64	131	0	262	1350	1250	1190	198	79	0	653
29	128	0	65	130	194	1270	1250	1160	162	61	0	653
30	192	—	130	65	564	1270	1250	1160	191	72	0	466
31	128	—	112	—	135	—	1220	1100	—	50	—	490
Mean	145	73.2	43.0	60.8	293	903	1151	1140	500	74.7	31.3	324
Ac-Ft	8902	4066	2642	3620	18040	53730	70790	70080	29730	4596	1862	19910

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	287968
			Water Year	285044

This is the drainage from Reclamation District 1500 discharged to West Borrow Pit of Sutter By-Pass and thence via Sacramento Slough (in the By-Pass) to Sacramento River, (see Table 68). Drainage is by pumping and gravity. Period of record 1930 to date. Records for 1955 computed by Division of Water Resources.

TABLE 68

FLOW OF SACRAMENTO SLOUGH TO SACRAMENTO RIVER - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	*410	699	303	413	726	001	481	515	730	283	204	281
2	*500	551	342	364	690	962	467	505	735	253	215	267
3	*490	534	264	378	736	915	496	498	719	171	217	262
4	*700	635	242	410	662	362	502	472	712	187	224	231
5	*510	507	168	354	624	736	541	437	663	211	230	237
6	*904	611	201	286	604	664	540	450	671	211	212	290
7	563	04	186	272	607	755	500	434	606	205	243	698
8	695	439	179	176	646	847	502	430	699	200	374	601
9	776	345	181	133	517	795	533	451	892	357	313	1570
10	503	320	215	174	670	689	495	445	956	226	280	1260
11	365	410	260	218	781	646	490	456	921	223	242	1100
12	397	332	205	298	764	571	485	462	896	277	276	1030
13	501	360	300	262	704	521	461	470	919	307	248	844
14	750	246	201	282	730	603	477	469	1150	301	252	659
15	628	292	197	224	876	657	471	403	1160	244	237	541
16	816	353	261	203	765	688	447	500	1160	241	337	421
17	757	279	244	154	792	700	426	518	1180	237	319	419
18	749	310	231	162	820	727	415	530	1600	300	297	525
19	726	330	238	218	747	673	410	530	1150	292	254	936
20	1000	270	200	364	862	631	406	529	948	276	286	
21	1730	283	187	302	902	612	452	535	1000	242	268	
22	2210	189	208	195	1030	563	458	553	830	200	404	F
23	2200	138	138	517	851	502	475	556	695	232	763	L
24	1870	231	161	355	898	447	434	598	644	189	771	O
25	1660	230	158	1030	875	386	492	597	662	190	671	O
26	1.8	180	188	1080	926	390	416	594	462	174	680	D
27	1330	257	182	722	910	*400	465	618	596	185	464	E
28	1230	237	219	758	911	*461	449	633	509	188	331	D
29	1090		297	781	791	*455	456	667	425	201	292	
30	979	—	307	747	1020	470	480	64	363	205	252	
31	852	—	408	—	746	—	503	692	—	211	—	
Mean	1022	362	232	423	700	644	477	526	815	233	338	
Ac-Ft	62860	20110	14280	25180	47980	38330	29340	32330	48520	14320	20140	

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	444850
			Water Year	

This is the discharge to the Sacramento River at Mile 21.2L via Sacramento Slough. This is the entire outflow of the Sutter By-Pass area and Reclamation District 1500. During high water periods the slough is entirely submerged as it lies within the By-Pass area. Sharp rises in river elevation will cause zero or negative flow. See Tables 65, 66, 67 and 56, which, when combined, will give the measured flow entering the By-Pass area. Period of record 1924 to date. Records for 1955 computed by Division of Water Resources.

* Estimated

TABLE 69

FLOW OF FEATHER RIVER NEAR OROVILLE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6340	2470	2110	4980	4970	4390	2210	2000	1580	1350	1800	2550
2	5110	2110	1950	5140	5030	4000	2160	2000	1550	1260	1910	2630
3	3560	1920	2080	4250	5040	4320	2150	1980	1540	1300	1870	2200
4	3590	1880	2120	3980	5200	4300	2150	1960	1540	1430	1800	1980
5	2950	1680	2000	3640	5460	4420	2140	1950	1540	1500	1510	2180
6	2270	1670	1820	3540	7620	3870	2110	1940	1520	1590	1340	8450
7	2240	1610	1950	3430	8300	3530	2060	1930	1460	1700	1460	5170
8	1840	1580	2080	3530	9700	3590	2020	1900	1440	1450	1800	3370
9	1810	1530	2780	3920	10600	3790	2000	1900	1440	1260	1760	3920
10	2430	1680	4380	4250	10100	3210	1990	1900	1440	1460	1760	3490
11	1900	1700	3980	4510	9930	3150	2000	1900	1440	1800	1760	2260
12	1770	1640	3930	4560	9860	3140	2000	1910	1540	1700	1550	2570
13	2070	1530	3980	4060	9860	3230	1980	1900	1680	1640	1460	2780
14	1890	1590	4180	3730	8670	3100	2010	1860	1770	1630	1750	2900
15	1930	1720	4030	3450	6860	2980	2010	1860	1820	1590	1920	2770
16	1920	1880	3330	3390	6210	2870	1990	1820	1720	1560	1920	2900
17	2180	2360	2880	3800	5930	2730	1960	1810	1740	1450	2200	4520
18	3140	3000	3080	4220	5990	2420	1970	1820	1550	1450	2450	6980
19	2420	2290	2930	4040	6960	2340	1980	1810	1470	1590	2410	50700
20	1910	2180	2460	4460	7500	2310	2010	1780	1430	1670	2430	66500
21	1790	2070	2880	5880	7380	2280	1990	1760	1540	1670	4700	49400
22	1790	1980	2330	6300	7360	2250	1990	1730	1610	1680	3330	150000
23	1790	1980	2460	5620	7020	2290	1990	1720	1540	1370	2360	172000
24	1800	2000	2460	5660	6660	2300	2000	1720	1650	1440	2120	92200
25	1740	2000	2980	5690	5850	2310	2010	1720	1310	1680	2100	45100
26	1670	2250	3180	6050	5460	2290	2000	1720	1290	1740	2040	63800
27	1710	3390	3430	5380	5320	2270	1960	1720	1320	1800	1740	51900
28	1760	2280	4480	5460	5190	2250	1910	1700	1340	1820	1810	31900
29	1740		7280	5400	4940	2250	1910	1680	1790	1760	1810	21200
30	1730	—	6960	5230	4710	2240	1920	1660	1780	1540	1920	17500
31	1980	—	5540	—	4960	—	2000	1630	—	1610	—	15200
Mean	2347	1999	3291	4585	6924	3014	2019	1829	1546	1564	2026	28740
Ac-Pt	144300	111000	202400	272800	425700	179300	124100	112400	91990	96180	120600	1767000

Maximum Discharge	Calendar year 203,000 c.f.s. December 23, 1955 of record 230,000 c.f.s. March 1, 1907	Total Runoff in Acre-Feet	Calendar Year	3647770
			Water Year	2297390

U. S. Geological Survey and Division of Water Resources cooperative station located at Highway crossing about 4.5 miles above Oroville on right bank, at Mile 71.0 Drainage area is 3611 square miles. Period of record 1902 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 70

FLOW OF FEATHER RIVER NEAR GRIDLEY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5400	2160	2040	4040	3240	2380	120	38	153	783	1180	2050
2	5060	2040	2010	3910	3200	1770	113	47	247	583	1240	2580
3	3510	1860	1940	3360	3230	1940	109	54	241	543	1280	2170
4	3480	1750	2060	3020	3280	1960	105	78	261	563	1240	1880
5	2910	1760	1970	2640	3380	2040	123	55	294	636	1130	2020
6	2350	1520	1890	2470	4850	1940	107	51	301	736	944	6740
7	2200	1600	1780	2280	5510	2130	90	47	268	806	906	5530
8	2010	1560	1980	2270	6520	1330	80	44	231	843	1190	3300
9	1850	1570	2340	2660	7490	1550	74	41	268	583	1220	3460
10	2040	1540	3550	2750	7160	1220	69	37	351	668	1220	3430
11	2080	1650	3560	3070	6860	1060	64	41	351	1110	1220	2410
12	1710	1660	3550	3170	6720	985	57	55	371	1110	1170	2300
13	1850	1480	3450	2560	6720	1080	52	102	548	1030	1150	2240
14	1940	1520	3600	2130	5950	1050	49	137	679	1010	1530	2720
15	1850	1590	3710	1540	4820	887	44	125	789	999	1 [illegible]	2020
16	1980	1690	3190	1460	3850	862	44	153	868	1020	1760	2710
17	1920	2010	2880	1410	3550	794	44	132	824	950	1880	3480
18	2880	2520	2790	2100	3340	553	42	155	765	887	2100	5310
19	2560	2280	2760	1950	4110	355	41	127	777	912	2330	29500
20	2040	2080	2450	2210	4550	286	42	102	679	1020	1960	63000
21	1770	1980	2600	3070	4690	212	42	82	712	1020	3740	43800
22	1730	1930	2490	4380	4710	180	44	64	856	1030	3240	•125000
23	1700	1880	2360	3720	4550	153	40	54	818	906	2320	•160000
24	1710	1860	2290	3680	4130	145	37	49	868	777	2090	•110000
25	1710	1900	2400	3640	3720	130	48	38	736	971	1960	49500
26	1680	2030	2660	4040	3180	137	72	36	614	1100	1920	47100
27	1580	2930	2780	3720	3000	169	76	38	609	1130	1850	51800
28	1730	2420	3360	3470	2840	142	48	45	657	1170	1700	35200
29	1660		5360	3610	2730	137	41	100	830	1170	1720	26200
30	1680	—	6030	3460	2400	132	45	115	985	1030	1860	21300
31	1780	—	4260	—	2600	—	40	127	—	944	—	18700
Mean	2269	1885	2919	2920	4410	924	64.6	76.5	562	904	1696	27050
Ac-Pt	139500	104700	179500	174100	271500	54900	3971	4705	33420	55620	100900	1663000

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	2785876
			Water Year	1554856

D[illegible] of Water Res[illegible] station loca[illegible] at Gridle[illegible]ridge at Mile 49.[illegible] a[illegible]ve [illegible]. Period of record 1944 to date.
a Estimated

TABLE 71

FLOW OF FEATHER RIVER AT YUBA CITY (5TH ST. BRIDGE) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6310	2560	2610	4940	4000	3380	*323	232	275	1170	1240	1940
2	7840	2880	2370	4620	3760	2470	*315	218	292	900	1440	2710
3	5780	2460	2150	4200	3820	2180	*310	210	308	796	1520	2520
4	4480	2230	2150	3470	3840	2300	*303	210	393	740	1500	2210
5	3860	2210	2220	3090	4070	2610	*298	225	389	801	1420	2050
6	3250	1950	2040	2810	5110	2980	*290	229	442	858	1200	5860
7	2700	1920	1860	2680	6660	2470	*284	241	456	985	1060	9460
8	2530	1880	1980	2330	8160	2270	*279	271	413	1080	1150	5000
9	2220	1840	2200	2700	10200	2230	*273	258	368	924	1370	4210
10	2530	1780	3290	2910	9760	2130	*268	241	372	784	1320	4370
11	3150	1870	4330	3380	9040	1730	*263	235	430	1150	1290	3500
12	2430	1880	4070	3370	8830	1520	*256	210	413	1420	1280	2690
13	2280	1810	3970	2970	8700	1400	*250	207	487	1400	1240	2910
14	2390	1700	3940	2680	7980	1340	*245	213	703	1320	1590	2950
15	2210	1700	4020	1950	6560	1310	*240	238	894	1270	1800	3000
16	2780	1800	3600	1680	4800	1250	*235	238	1080	1270	1910	2990
17	3230	2020	3090	1540	4180	1030	*231	241	1120	1270	2030	3400
18	4080	2580	2740	2550	3820	870	*228	258	1140	1150	2310	5620
19	5990	2860	2850	2650	4320	687	*223	238	991	1120	2520	*18700
20	4840	2410	2650	2590	5150	601	*220	238	1030	1200	2230	*61100
21	3190	2300	2360	3620	5900	518	*216	232	900	1270	3070	*58000
22	2650	2210	2560	6810	6180	446	*213	265	1020	1270	3990	*74200
23	2440	2100	2210	5650	6030	397	*210	241	1080	1260	3020	NR
24	2370	2030	2240	4940	5760	345	*206	235	1020	1020	2470	NR
25	2300	2010	2180	4890	5390	304	*204	222	1090	1030	2230	NR
26	2220	2120	2610	5290	4010	315	*201	241	807	1270	2180	NR
27	2070	3370	2770	5060	3650	330	201	261	734	1390	2120	NR
28	2190	3710	3190	4270	3670	349	219	261	745	1440	1840	NR
29	2120		5110	4340	3690	326	238	282	796	1430	1900	NR
30	2090	—	7520	4130	3760	333	235	285	1120	1350	1910	NR
31	2190	—	6040	—	3690	—	225	285	—	1170	—	NR
Mean	3249	2221	3126	3604	5629	1347	248	241	712	1145	1872	
Ac-Ft	199800	123400	192200	214400	346100	80170	15280	14790	42380	70430	111400	

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year 1817620

Division of Water Resources station located at Yuba City-Marysville (5th St.) Bridge, Mile 28.0 above mouth. Backwater from the Yuba River at times affects the stage-discharge relationship of this station. Period of record 1944 to date. The flows at this station were estimated for periods of backwater and missing gage height record.

* Estimated

TABLE 72

FLOW OF FEATHER RIVER BELOW SHANGHAI BEND - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6600	3610	4410	7630	6420	5920	*620	454	454	1350	1450	2580
2	8670	4110	4070	7160	6160	4660	*585	430	473	1110	1090	3270
3	7160	3600	3860	6760	6200	4040	*562	418	520	951	1790	3170
4	5440	3310	3830	5880	6260	4120	*550	412	559	861	1770	2890
5	4840	3230	3890	5380	6600	4530	*540	430	513	909	1710	2710
6	4140	3020	3720	4970	7500	5170	*542	436	506	951	1530	[illegible] 0
7	3480	2960	3520	4700	9550	4740	*540	436	513	1070	1370	10400
8	3260	2930	3650	4310	11200	4370	*538	480	460	1180	1430	5960
9	2930	2900	3930	4560	13700	4190	*530	480	400	1070	1660	4970
10	3220	2850	5030	4900	13700	4070	*530	454	394	900	1630	5120
11	3890	2970	6630	5360	12800	*3950	*525	448	448	1190	1560	4290
12	3230	2980	6260	5380	12700	*3050	*515	406	436	1470	1540	3370
13	2990	2910	6200	5080	12400	*2500	*510	388	486	1500	1530	3540
14	3100	2810	6120	4710	11800	*2020	*510	388	700	1430	1860	3610
15	2960	2870	6190	3880	10000	*2150	*510	430	892	1380	2130	3670
16	3700	3030	5800	3370	7910	*2040	*510	418	1080	1400	2310	3630
17	4260	3310	5250	3230	7030	*1860	*505	406	1140	1400	2490	3960
18	4980	3970	4860	4480	6550	1690	*500	442	1140	1310	2770	6190
19	7140	4330	4900	4770	7010	1450	*500	424	1050	1260	2960	*40000
20	6080	3840	4700	4550	8080	1280	*498	418	1070	1340	2780	*91600
21	4340	3750	4340	5600	9040	1290	*495	418	942	1400	3210	*103000
22	3650	3620	4570	9370	9430	1300	*495	436	1040	1420	4570	*153000
23	3400	3460	4210	8760	9230	1270	*490	418	1140	1420	3750	NR
24	3320	3390	4220	7630	9070	1230	*490	406	1090	1230	3130	NR
25	3260	3360	4120	7510	8620	1220	*488	376	1150	1190	2860	NR
26	3170	3520	4610	7900	6820	*1040	*488	406	917	1420	2790	NR
27	3050	4940	4860	7780	6170	*870	*480	424	830	1670	2730	NR
28	3110	5710	5280	6820	6190	*730	*480	430	822	1760	2470	NR
29	3080		7190	6720	6220	*615	*470	442	876	1770	2520	NR
30	3040	—	10300	6570	6490	*640	467	473	1200	1660	2520	NR
31	3140	—	9060	—	6330	—	454	454	—	1420	—	NR
Mean	4149	3475	5148	5857	8619	2600	513	428	775	1303	2284	
Ac-Ft	255100	193000	316500	348500	529900	154700	31570	26340	46110	80120	135900	

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year 2540720

Division of Water Resources station located on the right bank at Mile 23.0 above mouth. Station is rated above 30,000 c.f.s. by means of simultaneous measurements of Yuba River and Feather River at Marysville with appropriate time lag between Marysville and Shanghai Bend. Severe silting conditions and shifting control necessitated the estimating of much of the record for 1954. Period of record 1944 to date.

* Estimated

TABLE 73

FLOW OF FEATHER RIVER AT NICOLAUS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8490	3740	4810	7230	6830	6280	521	386	420	1320	1190	3000
2	11400	4600	4150	6510	6660	4790	514	395	411	1190	1460	3600
3	9[illegible]0	4130	3800	6190	6620	3980	493	392	417	954	1580	3200
4	[illegible]180	3650	3550	5240	6690	3900	521	398	479	828	1660	2800
5	5870	3350	3510	4720	6990	4290	500	398	486	858	1610	2900
6	4920	3200	3380	4490	7710	5020	476	380	472	864	1500	9000
7	4060	2940	3160	4030	10000	4770	[illegible]79	374	468	1150	1230	11000
8	[illegible]30	2890	3110	3670	11800	4240	472	404	451	996	1180	6700
9	3370	2820	3350	3790	14200	4040	458	424	430	1140	1480	5440
10	3730	2780	4180	4250	14700	3910	448	389	404	989	1480	5280
11	5100	2810	5340	4150	13700	3380	451	374	392	940	1440	4620
12	4570	2880	6120	4850	13200	2960	440	368	420	1440	1390	3630
13	3970	2840	5960	4660	13000	2610	414	348	437	1530	1350	3480
14	3910	2790	5890	4150	12700	2500	417	338	521	1520	1480	3620
15	3820	2790	5920	3510	11000	2380	404	332	786	1520	1920	3660
16	5240	3060	5590	2930	8820	2470	386	330	1000	1330	2190	3600
17	6560	3250	4890	2840	7470	1980	383	322	1140	1360	2300	3780
18	[illegible]10	3980	4400	3730	6860	1690	374	340	1120	1310	2760	5480
19	10900	4[illegible]80	4390	4470	7040	1410	404	365	1140	1220	3040	15000
20	9670	4220	4250	4230	8260	1190	398	362	1060	1180	2950	72200
21	7020	3990	3840	5070	9120	1020	386	365	982	1260	2650	104000
22	5410	3950	3960	8670	9650	850	386	374	968	1270	4790	154000
23	4410	3790	3600	10200	9630	730	392	392	1140	1260	4170	313000
24	3970	3630	3550	8300	9500	715	392	368	1120	1190	3290	109000
25	3730	3600	3420	7890	9170	646	392	351	1040	1070	3010	54400
26	3570	3530	3770	8160	7490	472	398	338	996	1140	2800	51300
27	3400	4970	3970	8380	6400	490	374	351	816	1340	2690	60100
28	3280	7340	4340	7200	6260	493	368	368	740	1570	2550	58900
29	3330		5830	6900	6300	496	392	380	740	1570	2290	48900
30	3220	—	9260	6770	6670	496	389	398	870	1540	2400	38500
31	3260	—	8950	—	6480	—	392	411	—	1300	—	31600
Mean	5383	3646	4685	5580	9062	2475	426	371	729	1231	2194	38570
Ac-Pt	331000	202500	288100	332100	557200	147300	26210	22840	43370	75670	130600	2372000

Maximum Discharge	Calendar Year [illegible] c.f.s. February 23, 1955 of record [illegible],000 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 4528890 Water Year 2674720

Station is maintained jointly by Division of Water Resources and U. S. Geological Survey. It is located on left bank at Mile [illegible] above mouth. Period of record 1921 to date. Records for 1955 computed by U. S. Geological Survey. Records for December do not include an estimated 500,000 acre-feet that by-passed station into Sutter Basin due to levee breaks. Recorder removed on June 23, 1955 due to levee repair work. Recorder reinstalled 200 feet downstream from previous location on November 29, 1955.

TABLE 74

FLOW OF SOUTH HONCUT CREEK NEAR BANGOR - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	156	56	48	6.6	20	4.0	0.2				0	7.3
2	54	28	41	6.9	19	3.9	0.2				0	10
3	30	23	34	6.9	13	3.5	0.2				0	5.7
4	21	19	29	6.6	12	3.2	0.2				0	3.5
5	15	17	24	6.2	11	3.0	0.1				0	14
6	12	15	21	5.8	11	2.3	0.1				0	868
7	11	14	18	5.4	11	1.7	0.1				0	69
8	9.7	13	16	5.2	15	1.4	0.1				0	32
9	12	12	18	5.0	12	1.1	0.1				0	53
10	24	12	21	5.0	9.4	1.0	0.1				0	22
11	20	11	18	4.8	9.7	1.0	0.1				0	15
12	16	10	15	4.6	8.9	0.9	0.1				0	13
13	14	9.7	14	4.8	8.2	0.9	0.1	N	N	N	0.8	10
14	12	9.7	14	5.0	8.2	1.0	0.1	O	O	O	2.4	8.2
15	17	9.4	12	5.2	7.8	1.1	0.1				3.9	7.2
16	53	9.9	12	5.0	7.5	1.0	0.1				3.2	11
17	45	12	12	18	6.2	1.0	0.1	F	F	F	5.4	94
18	160	12	11	26	5.4	0.9	0.1	L	L	L	4.5	289
19	138	10	10	27	5.0	0.8	0	O	O	O	5.2	1670
20	71	12	9.7	73	4.8	0.6	0	W	W	W	5.7	533
21	49	12	9.4	226	4.4	0.5	0				12	474
22	43	12	8.9	106	4.2	0.4	0				6.8	1260
23	48	11	8.9	50	3.9	0.4	0				4.6	1440
24	39	8.9	8.2	36	3.9	0.3	0				8.0	354
25	34	8.4	7.8	33	4.0	0.3	0				5.0	150
26	31	18	7.3	45	4.0	0.3	0				3.5	1050
27	26	209	7.3	30	3.9	0.2	0				2.9	275
28	23	69	7.8	27	3.5	0.2	0				2.5	138
29	20		8.7	22	3.4	0.2	0				2.3	96
30	19	—	8.2	19	3.9	0.2	0				2.1	80
31	21	—	6.9	—	3.7	—	0		—		—	107
Mean	40.1	53.7	14.7	27.4	8.0	1.2	0.1	0	0	0	2.7	295
Ac-Pt	2470	1[illegible]	9[illegible]	1[illegible]40	492	74	4	0	0	0	160	18170

Maximum Discharge	Calendar Year [illegible] c.f.s. December [illegible], of record [illegible] c.f.s. December [illegible], [illegible]	Total Runoff in Acre-Feet	Calendar Year 2529[illegible] Water Year 89[illegible]

[illegible]. S. Geological Survey, and [illegible] of Water Resources cooperative station located approximately [illegible] miles southeast of Bangor [illegible] [illegible] to mouth. Honcut Creek is an east-side tributary to the Feather River at Mile 43.7L. Drainage area is [illegible] square miles. Prior records available at a site about [illegible] miles downstream. Period of record 1950 to date. Records for 1955 [illegible] [illegible]. S. Geological Survey.

TABLE 75

FLOW OF YUBA RIVER AT ENGLEBRIGHT DAM - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	777	1320	1080	2210	2440	2700	713	690	575	250	220	580
2	2950	1170	1020	2120	2410	2220	721	685	561	175	200	505
3	2100	1030	1010	1870	2460	2100	714	685	574	170	220	545
4	1560	976	1010	1680	2710	2340	711	685	502	170	244	595
5	1300	943	1000	1560	3020	3040	710	668	375	170	250	600
6	1140	923	976	1490	3840	3300	710	675	340	0	250	620
7	1030	912	962	1470	4810	3220	711	670	295	142	250	640
8	954	892	998	1500	5990	3060	710	665	245	170	250	640
9	930	892	1150	1550	6620	2800	710	650	221	175	250	645
10	940	892	2090	1810	5880	2560	700	649	215	175	250	650
11	900	888	2010	1910	5490	2220	700	648	208	250	234	655
12	862	880	1840	1770	5450	1900	700	646	185	310	248	630
13	852	852	1800	1750	5450	1720	704	610	185	250	270	570
14	842	892	1700	1710	4660	1620	704	635	180	234	320	670
15	851	902	1540	1570	3800	1930	705	635	158	235	370	680
16	1100	922	1420	1520	3240	1430	700	630	184	210	425	690
17	1020	1110	1340	1930	2960	1270	650	625	190	222	490	690
18	1160	1300	1280	2340	3060	1170	700	625	168	160	450	640
19	1200	1140	1220	1970	3460	1110	700	620	165	170	380	25200
20	1070	1200	1190	2060	4140	1030	700	620	160	230	350	34100
21	964	1160	1160	2630	4680	948	700	620	160	232	510	22200
22	922	1090	1120	4180	4750	909	700	615	160	250	570	98900
23	920	1040	1110	3300	4720	870	700	605	155	222	575	123000
24	920	976	1110	3180	4850	835	700	600	145	130	570	48600
25	940	941	1150	3210	3970	810	700	600	145	180	575	20800
26	942	963	1230	3240	3030	770	700	599	175	383	578	26700
27	956	1440	1360	2740	3010	758	700	598	215	390	580	23800
28	948	1230	1760	2580	3340	727	700	590	295	372	580	13400
29	935		2780	2440	3670	708	700	585	300	311	585	9450
30	945	—	3250	2410	3940	708	700	575	324	208	585	7560
31	1000	—	2490	—	3880	—	690	575	—	235	—	6660
Mean	1095	1031	1457	2190	4056	1693	702	632	259	219	388	15210
Ac-Ft	67300	57270	89570	130300	249400	100700	43170	38830	15390	13450	23070	935400

Maximum Discharge	Calendar year 148,000 c.f.s. December 23, 1955 of record 148,000 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year	1763850
			Water Year	873030

U. S. Geological Survey and Division of Water Resources cooperative station located above spillway of Englebright Dam. Combine with flows in Table 77 for total flow of Yuba River near Smartville. Drainage area is 1110 square miles. Period of record 1941 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 76

FLOW OF YUBA RIVER NEAR MARYSVILLE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2330	1630	1450	2210	2400	2630	279	264	231	168	107	540
2	3220	1560	1430	2100	2350	1980	276	258	231	168	79	728
3	2580	1320	1270	1840	2380	1780	282	264	225	77	70	658
4	1910	1210	1250	1660	2520	1840	282	258	222	58	86	636
5	1560	1130	1220	1490	2780	2410	282	258	148	54	112	636
6	1360	1080	1180	1360	3440	2880	279	255	93	50	116	3330
7	1170	1050	1120	1290	4410	2790	273	255	81	47	116	1400
8	1040	1020	1150	1290	5540	2590	267	255	72	46	116	856
9	990	999	1270	1280	6410	2460	270	252	68	44	110	964
10	1270	990	1940	1510	5890	2200	279	255	65	46	99	828
11	1190	981	2180	1700	5470	1930	276	252	64	44	94	734
12	1070	950	1920	1600	5380	1610	279	243	64	46	80	698
13	1010	974	1890	1500	5360	1370	276	222	59	130	101	692
14	990	966	1820	1510	4760	1250	279	225	60	84	180	680
15	934	982	1700	1340	3890	1420	279	231	59	88	240	674
16	1900	999	1530	1220	3260	1130	279	214	55	73	279	692
17	1670	1170	1420	1420	2900	929	267	220	58	73	431	771
18	2450	1460	1350	2440	2830	740	264	222	59	77	471	1250
19	2400	1320	1300	2030	3120	650	294	217	60	62	453	24200
20	1850	1300	1280	2120	3670	581	282	217	58	51	359	42800
21	1460	1320	1240	2880	4120	490	282	220	55	47	516	26000
22	1310	1230	1180	4960	4400	422	282	220	52	50	610	113000
23	1280	1160	1140	3660	4240	375	282	208	51	79	610	137000
24	1250	1090	1080	3190	4460	344	282	206	49	75	625	52100
25	1200	1040	1070	3150	3910	338	276	208	46	71	610	22400
26	1220	1050	1180	3420	2840	310	276	208	46	51	595	34000
27	1180	2500	1270	2890	2660	294	273	198	44	234	595	26900
28	1190	1920	1540	2580	2900	279	279	200	44	222	590	15200
29	1170		2480	2440	3120	264	273	200	49	211	595	10700
30	1150	—	3300	2370	3490	279	270	217	110	144	605	8570
31	1220	—	2610	—	3470	—	270	228	—	84	—	7940
Mean	1501	1229	1541	2148	3818	1286	277	231	85.9	88.8	322	17340
Ac-Ft	92280	68230	94730	127800	234800	76490	17040	14180	5110	5460	19140	1066000

Maximum Discharge	Calendar year 136,000 c.f.s. December 23, 1955 of record 136,000 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year	1821260
			Water Year	810210

U. S. Geological Survey and Division of Water Resources cooperative station located at Mile 5.2 above mouth. Period of record 1954 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 77

FLOW OF DEER CREEK NEAR SMARTVILLE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	533	159	119	28	53	7.8	4.6	4.7	5.2	5.0	6.1	146
2	210	82	102	27	48	6.6	4.6	4.9	5.3	5.0	6.6	58
3	92	65	88	24	44	5.5	7.9	4.7	5.3	5.2	6.6	31
4	67	56	79	21	42	5.2	5.2	4.7	4.9	5.0	6.3	20
5	58	52	69	27	35	5.0	5.3	5.0	4.6	5.0	6.3	50
6	52	48	58	20	25	4.7	5.2	5.2	4.9	4.9	6.3	1590
7	49	44	55	17	34	4.6	4.9	5.3	5.0	4.7	5.8	148
8	44	45	50	14	76	4.7	4.7	5.3	5.2	4.9	5.5	107
9	55	43	63	12	43	4.2	4.9	4.9	5.0	4.9	5.3	178
10	94	43	72	19	35	4.0	4.7	4.9	4.7	12	5.0	77
11	62	42	56	23	22	3.9	4.5	4.5	4.9	14	5.3	50
12	47	42	50	23	23	4.3	4.5	4.5	4.7	9.4	5.3	42
13	42	41	42	25	18	4.9	4.3	4.6	4.6	7.5	10	37
14	40	39	42	19	15	5.2	4.5	4.5	5.5	7.5	29	34
15	106	40	38	10	14	5.2	4.5	4.6	5.8	7.2	22	31
16	320	42	35	11	14	5.2	4.3	4.7	5.6	6.8	22	41
17	142	59	35	87	14	5.2	3.9	4.6	5.6	6.3	64	115
18	443	49	35	103	11	5.5	4.0	4.3	6.8	6.6	35	392
19	366	41	36	65	9.4	5.6	4.0	4.5	4.9	5.6	36	4440
20	170	41	35	90	7.8	5.3	4.1	4.7	4.9	5.5	35	1790
21	112	38	31	293	6.8	5.2	4.3	4.9	5.0	4.9	90	914
22	96	38	27	290	6.6	5.0	4.6	4.9	5.3	4.6	36	4700
23	91	36	26	102	6.3	4.9	4.7	4.9	5.2	4.3	25	5650
24	78	35	24	74	6.1	4.9	4.7	4.7	4.9	4.2	35	1260
25	72	35	23	65	6.1	4.9	4.6	4.9	4.6	4.2	23	656
26	72	52	22	112	8.2	4.9	4.5	5.0	4.6	5.6	17	2940
27	67	575	20	77	6.3	4.9	4.6	4.9	4.3	6.6	17	1600
28	63	187	24	57	6.6	5.0	4.5	4.9	4.5	6.8	16	928
29	56		33	50	6.1	5.0	4.7	5.0	4.6	6.6	16	668
30	62	—	37	54	6.6	4.9	4.6	5.2	5.0	6.3	14	530
31	74	—	29	—	8.2	—	4.6	5.2	—	6.1	—	540
Mean	124	73.9	47.1	61.3	21.2	5.1	4.6	4.8	5.0	6.2	20.4	960
Ac-Ft	7610	4100	2890	3650	1300	302	282	297	300	383	1210	59030

Maximum Discharge	Calendar year 11,[illegible] c.f.s. December 23, 1955 of record 11,300 c.f.s. March 9, 1955 and December 23, 1955	Total Runoff in Acre-Feet	Calendar Year	81354
			Water Year	29587

U. S. Geological Survey and Division of Water Resources cooperative station located one mile upstream from the mouth. Deer Creek is a tributary to the Yuba River one mile below Englebright Dam. For total flow of Yuba River near Smartville combine with flows in Table 75. Drainage area is 83.5 square miles. Period of record 1935 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 78

FLOW OF DRY CREEK AT VIRGINIA RANCH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	619	135	114	30	74	8.6	8.2	6.9	6.4	1.5	1.4	23
2	193	115	97	30	68	8.2	8.2	6.9	6.6	1.5	1.3	11
3	104	82	89	27	70	8.0	8.0	6.9	7.6	1.5	1.3	7.2
4	69	67	87	26	62	7.6	8.0	5.2	7.6	1.6	1.3	6.9
5	76	60	76	24	47	7.4	8.0	7.2	7.2	1.8	1.4	47
6	66	54	65	24	37	7.2	7.6	7.2	4.8	1.4	1.4	2070
7	58	50	65	23	36	6.9	7.4	7.4	4.0	1.2	1.4	277
8	54	48	74	18	90	6.6	7.2	7.6	3.4	1.0	1.3	107
9	54	47	78	16.6	57	6.4	6.9	7.6	2.9	1.1	1.3	178
10	96	45	102	16.6	38	6.4	6.9	7.6	2.4	2.0	1.3	89
11	66	43	73	14.0	34	6.6	6.6	7.6	1.9	1.9	1.3	54
12	54	41	62	14.4	30	6.9	6.4	7.6	1.5	1.3	1.2	40
13	53	41	56	14.4	27	7.2	6.2	7.6	1.8	1.2	2.4	33
14	51	40	49	14.2	25	7.2	5.6	7.6	1.0	1.2	3.6	28
15	54	39	43	13.8	22	6.6	5.6	7.6	1.6	1.3	2.4	25
16	53	43	39	13.	20	6.4	5.6	7.4	1.0	1.3	2.9	45
17	131	61	34	59	20	5.9	5.6	7.4	2.0	1.3	6.9	264
18	104	50	36	147	17	5.9	6.4	7.6	1.5	1.5	4.8	601
19	320	39	34	170	15	5.9	6.6	7.6	1.6	1.4	4.6	5150
20	176	37	32	342	14	5.6	6.9	7.6	1.4	1.4	4.9	1920
21	103	34	31	436	13	5.4	6.9	7.6	1.3	1.4	9.8	1430
22	90	32	30	390	12	5.2	6.6	7.6	1.2	1.4	5.9	4320
23	115	31	30	162	12	5.6	6.6	7.4	1.3	1.4	6.9	4270
24	90	30	31	133	11	5.4	6.6	7.4	1.2	1.3	8.2	1110
25	80	29	30	100	12	5.2	6.6	7.2	1.2	1.3	5.9	453
26	74	34	37	108	11	5.9	6.6	7.2	1.2	1.2	5.2	2200
27	71	130	44	92	11	5.7	6.9	6.9	1.3	1.8	5.0	745
28	74	134	50	75	9.4	5.9	7.2	6.9	1.4	1.5	5.0	413
29	69		48	72	9.2	6.6	7.2	6.9	1.5	1.4	5.0	289
30	73	—	45	66	8.9	6.6	7.2	6.6	1.5	1.4	5.0	241
31	77	—	33	—	8.7	—	6.9	6.4	—	1.4	—	370
Mean	102	71.	53.4	61.	24.7	6.7	6.9	7.	2.	1.4	3.7	784
Ac-Ft	6278	4[illegible]	3280	3[illegible]	1 30	3 9	423	445	168	88	219	54366

Maximum Discharge	Calendar year [illegible]. December [illegible], 1[illegible] of record [illegible]. December 22, 1[illegible]	Total Runoff in Acre-Feet	Calendar Year	78969
			Water Year	30660

U. S. Geological Survey and Division of Water Resources cooperative station located .4 mile south of Virginia Ranch and 2.9 miles southeast of Oregon House. Dry Creek is a north-side tributary to the Yuba River at mile 11.0. Drainage area is 71.5 square miles. Period of record [illegible] to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 79

FLOW OF DRY CREEK NEAR WHEATLAND - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	746	68	73	5.2	18	1.5			0	5.0	0.2	4.5
2	264	60	54	3.8	17	0.3			0	7.3	0.1	37
3	119	41	43	3.4	13	0.2			0	4.3	0	22
4	75	35	37	3.6	7.3	0.4			0	5.1	0	13
5	55	31	31	4.0	0.8	0.3			0	4.6	0	9.3
6	44	30	28	3.8	0.4	0			0	3.4	0	303
7	36	27	25	3.2	0.4	0			0	2.8	0	104
8	31	25	23	2.7	6.8	0			0	6.2	0	43
9	49	24	24	2.5	28	0			0	7.3	0	65
10	177	22	26	3.2	15	0			0	6.5	0	51
11	83	20	25	4.0	9.9	0			0	17	0	31
12	56	18	19	2.7	7.3	0	N	N	0	28	0	19
13	46	16	17	2.4	4.8	0	0	0	0	16	0	12
14	40	15	15	2.5	2.7	0			0	11	0	9.0
15	80	14	12	2.6	2.7	0			0	7.8	0.1	7.6
16	457	14	11	2.5	2.9	0			13	8.0	5.0	7.6
17	247	16	9.9	2.6	3.0	0	F	F	17	8.7	12	12
18	816	19	9.4	40	2.6	0	L	L	17	1.7	27	69
19	502	13	9.1	34	1.8	0	O	O	18	1.7	15	3360
20	260	11	7.8	34	1.5	0	W	W	25	2.1	12	1750
21	162	11	7.1	49	1.6	0			20	3.2	15	478
22	124	9.9	6.4	129	1.4	0			16	5.0	26	2960
23	101	9.6	6.4	61	1.2	0			20	3.0	16	4710
24	82	9.4	6.4	31	1.1	0			14	1.7	11	1350
25	70	9.1	6.2	23	0.9	0			11	1.3	11	319
26	61	9.9	5.9	24	0.5	0			7.3	1.3	8.7	1910
27	54	229	5.9	26	0.4	0			4.4	1.2	6.5	684
28	46	132	5.9	20	0.2	0			4.2	0.7	6.1	248
29	43		6.4	15	0.2	0			1.6	0.5	4.8	158
30	40	—	7.6	14	0.2	0			4.4	0.3	4.5	127
31	40	—	8.3	—	0.4	—			—	0.6	—	215
Mean	161	33.5	18.5	1 .5	5.0	0.1	0	0	6.4	5.3	6.0	616
Ac-Ft	9930	1860	1140	1100	305	3	0	0	378	324	359	37860

Maximum Discherge	Calendar year 8790 c.f.s. December 23, 1955 of record 8790 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Yeer 53259 Water Year 18358

U. S. Geological Survey and Division of Water Resources cooperative station located 2300 feet upstream from Highway 99E bridge and 1.3 miles northwest of Wheatland. Dry Creek is a north-side tributary to the Bear River at Mile 4.5 above the mouth. Drainage area is 99.5 square miles. Period of record 1940 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 80

FLOW OF BEAR RIVER NEAR WHEATLAND - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2260	415	620	17	442	115	9.6	4.1	5.8	5.5	9.6	170
2	846	312	602	17	416	99	9.2	3.5	5.5	5.8	8.9	218
3	430	330	430	14	352	71	9.6	3.6	5.5	6.1	9.6	96
4	358	250	322	12	366	42	9.2	3.1	5.5	8.5	11	69
5	270	203	242	10	334	78	9.2	3.4	7.5	6.8	12	69
6	222	192	210	6.8	302	67	9.2	3.9	7.5	7.5	11	1540
7	199	171	192	1.4	348	35	8.5	3.6	6.4	5.8	12	421
8	181	152	188	0	465	47	8.5	4.6	7.5	5.8	13	221
9	192	145	192	0	402	46	8.2	3.4	6.8	7.5	16	438
10	438	139	222	0	339	27	8.5	3.0	5.8	17	12	249
11	742	136	390	16	278	64	8.9	3.4	3.4	76	5.5	174
12	698	134	371	11	232	38	9.2	4.9	3.0	71	4.9	147
13	668	131	358	9.2	243	42	9.6	4.9	2.8	69	5.5	132
14	638	131	340	14	243	29	8.9	5.5	5.2	69	12	120
15	668	294	304	16	218	21	8.9	8.2	3.1	65	46	110
16	1490	400	258	16	198	16	9.2	4.6	6.4	60	36	98
17	827	450	242	19	148	19	9.2	7.5	9.6	69	82	160
18	1390	530	230	20	201	16	9.6	6.4	10	124	89	393
19	1270	518	242	17	190	17	10	6.1	10	67	73	7070
20	620	502	218	23	174	15	9.6	5.8	6.4	26	73	9390
21	415	480	181	32	154	12	9.2	6.1	2.8	20	130	3170
22	326	579	161	396	145	12	9.2	6.4	1.0	16	102	22000
23	294	546	131	592	142	10	6.3	5.8	1.2	14	73	22100
24	266	557	122	352	142	9.6	8.2	5.2	4.0	19	87	13000
25	246	596	120	258	158	8.9	5.5	5.8	4.2	19	71	4290
26	238	410	91	344	215	8.5	4.9	5.8	5.2	20	60	7310
27	222	1190	34	290	96	8.9	4.6	5.8	0.2	20	51	5460
28	214	814	22	198	96	9.2	3.5	4.6	2.5	18	42	3010
29	203		21	174	107	9.6	2.8	5.8	6.1	17	37	2300
30	206	—	16	170	80	10	3.1	6.1	5.5	15	36	1870
31	230	—	16	—	99	—	4.1	5.8	—	10	—	1790
Mean	557	382	229	102	236	33.4	7.9	5.0	5.2	31.0	41.0	3470
Ac-Ft	34250	21240	14060	6040	14530	1990	484	311	310	1900	2440	213400

Maximum Discherge	Calendar year 33,000 c.f.s. December 22, 1955 of record 33,000 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year 310955 Water Year 123215

U. S. Geological Survey and Division of Water Resources cooperative station located on Highway 99E bridge 11.3 miles above the mouth. The Bear River flows into the Feather River above Nicolaus at Mile 12.0L. Drainage area is 295 square miles. Period of record 1928 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 81

FLOW OF COON CREEK AT HIGHWAY 99F - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	[illegible]	119	110	18	72	[illegible]	3.5	*3.5	6.1	8.3	6.5	61
2	26[illegible]	[illegible]	92	21	69	7.2	2.8	*3.7	3.7	13	7.2	69
3	151	73	73	21	59	6.9	2.0	*3.7	3.5	15	7.2	32
4	117	70	65	19	55	6.1	3.5	*4.0	7.2	12	7.6	22
5	[illegible]	[illegible]	61	22	[illegible]	[illegible]	[illegible]	4.2	[illegible]	[illegible]	13	21
6	[illegible]	[illegible]	[illegible]	31	41	2.3	2.5	4.2	6.1	10	12	*548
7	1	2	[illegible]	17	37	1.3	2.8	5.1	6.9	11	13	140
8	73	61	2	9.2	76	0.9	3.0	4.5	4.7	7.9	11	76
9	*[illegible]	[illegible]	[illegible]	4.0	51	*1.4	3.7	4.0	3.7	9.2	7.6	163
10	*[illegible]	[illegible]	[illegible]	4.7	41	*1.9	2.0	[illegible]	6.1	19	7.2	83
11	*117	[illegible]	[illegible]	4.5	34	2.5	1.9	6.1	4.0	63	7.6	55
12	* 9	[illegible]	[illegible]	4.7	29	4.5	1.1	4.0	4.5	42	5.1	40
13	*7[illegible]	[illegible]	[illegible]	4.0	27	[illegible]	1.0	1.9	3.7	35	11	33
14	[illegible]	[illegible]	[illegible]	4.5	25	6.9	*1.3	4.5	9.2	30	55	28
15	112	[illegible]	[illegible]	[illegible]	20	4.0	*1.3	4.2	20	2[illegible]	[illegible]	25
16	773	[illegible]	[illegible]	[illegible]	17	3.3	*1.3	2.3	18	26	[illegible]	33
17	3[illegible]	[illegible]	[illegible]	22	12	7.2	*1.3	4.0	17	22	105	38
18	[illegible]	[illegible]	[illegible]	117	18	[illegible]	1.6	[illegible]	24	22	[illegible]	89
19	[illegible]	[illegible]	[illegible]	[illegible]	24	[illegible]	*1.8	[illegible]	23	22	34	*2870
20	350	[illegible]	[illegible]	[illegible]	23	[illegible]	1.9	[illegible]	14	23	[illegible]	*1510
21	23[illegible]	[illegible]	[illegible]	135	23	2.5	2.2	4.5	12	22	55	*520
22	180	[illegible]	*[illegible]	267	19	2.2	*3.0	4.0	10	22	36	2550
23	*151	[illegible]	*[illegible]	124	18	2.8	*3.0	[illegible]	11	18	26	4070
24	*135	[illegible]	*[illegible]	[illegible]	17	[illegible]	*3.0	[illegible]	[illegible]	*15	3[illegible]	*1190
25	*124	[illegible]	[illegible]	73	18	[illegible]	*3.0	1.5	[illegible]	*12	[illegible]	*396
26	*112	[illegible]	[illegible]	[illegible]	15	[illegible]	*3.0	2.8	[illegible]	*11	19	*1640
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	*3.0	[illegible]	[illegible]	*10	[illegible]	*[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	*3.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	—	[illegible]	—	[illegible]	—	*3.5	[illegible]	—	8.3	—	360
Mean	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ac-Ft	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Maximum Discharge	Calendar year *3180 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year Water Year	[illegible]

Division of Water Resources station located at the Highway 99E bridge. Coon Creek is an east-side tributary to the Sacramento River at Mile 19.6L, via "Natomas Cross Canal", to the main drain between Reclamation Districts 1000 and 1001. Drainage area is 82.5 square miles. Period of record 1947 to date.

* Estimated

TABLE 82

FLOW OF AUBURN RAVINE AT LINCOLN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	*[illegible]	93	48	*12	*38	44	62	61	43	5.8	5.6	4[illegible]
2	*12[illegible]	75	[illegible]	*11	*34	45	61	61	43	5.4	5.8	37
3	*[illegible]	70	[illegible]	*9.6	*30	48	61	56	43	5.6	6.0	27
4	*76	70	[illegible]	*8.8	*26	41	64	54	46	6.2	6.6	22
5	*[illegible]	66	40	*7.8	*24	40	63	56	44	5.6	6.8	24
6	*63	[illegible]	38	*14	*22	*42	62	54	44	5.4	6.4	*234
7	*[illegible]	53	37	*[illegible]	*27	*39	63	55	43	4.8	6.4	*66
8	52	[illegible]	36	*[illegible]	*40	*35	61	57	44	4.2	6.2	55
9	60	[illegible]	[illegible]	*[illegible]	*32	*32	63	53	43	4.4	5.8	67
10	[illegible]	*43	45	*4.6	*27	34	[illegible]	53	43	11	5.6	51
11	64	*[illegible]	44	*1.4	*22	36	64	55	42	19	6.0	38
12	55	40	41	*[illegible]	*17	3	63	55	40	8.0	6.2	36
13	5[illegible]	38	3[illegible]	*4.[illegible]	*17	3[illegible]	66	5[illegible]	32	5.4	[illegible]	36
14	53	3[illegible]	[illegible]	*3.2	*16	37	56	63	37	[illegible]	24	35
15	75	32	43	*3.7	*15	36	[illegible]	61	32	[illegible]	23	36
16	271	34	*35	*4.8	*15	45	[illegible]	[illegible]	26	[illegible]	25	[illegible]
17	132	3[illegible]	*3[illegible]	*22	23	56	50	*5[illegible]	24	5.8	[illegible]	[illegible]
18	277	32	3[illegible]	*51	22	5[illegible]	54	*60	2[illegible]	5.6	26	66
19	3[illegible]	23	34	*32	21	59	[illegible]	[illegible]	*25	5.4	24	*771
20	180	27	31	*37	24	56	[illegible]	63	*21	5.0	21	480
21	[illegible]	[illegible]	2[illegible]	*[illegible]	30	56	[illegible]	61	*17	5.4	34	*17[illegible]
22	[illegible]	2[illegible]	25	65	30	51	50	60	*13	5.0	23	*95[illegible]
23	[illegible]	24	25	30	30	52	[illegible]	62	*10	[illegible]	24	*1580
24	[illegible]	23	25	*22	3[illegible]	52	51	64	7.8	[illegible]	24	*[illegible]
25	7[illegible]	24	*24	*24	[illegible]	54	55	64	[illegible]	[illegible]	24	*138
26	75	25	*[illegible]	32	[illegible]	55	66	58	[illegible]	5.2	[illegible]	*[illegible]
27	74	155	*20	*23	45	57	64	[illegible]	5.6	6.8	18	*228
28	[illegible]	[illegible]	*13	*[illegible]	43	60	63	57	6.4	[illegible]	20	*121
29	73		*17	*20	[illegible]	[illegible]	62	57	7.0	5.8	20	118
30	[illegible]	—	*1[illegible]	*32	45	[illegible]	[illegible]	46	6.0	5.4	20	104
31	74	—	*14	—	43	—	[illegible]	—	—	5.4	—	164
Mean	110	[illegible]	33.3	[illegible]	[illegible]	47.3	[illegible]	[illegible]	[illegible]	6.0	[illegible]	220
Ac-Ft	[illegible]	[illegible]	2045	[illegible]	1841	[illegible]	[illegible]	[illegible]	1640	[illegible]	[illegible]	13560

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year	[illegible]

Division of Water Resources station located 500 feet downstream from the Lincoln-Newcastle Road. Auburn Ravine is an east-side tributary to the Sacramento River at Mile 19.6L via "Natomas Cross Canal", the main drain between Reclamation Districts 1000 and 1001. Drainage area is [illegible] square miles. Period of record 1947 to date.

* Estimated

TABLE 83

FLOW OF NATOMAS CROSS CANAL AT HEAD - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	531	185	320	30	54	9.1	*1.0	*1.0	3.8	10	9.3	45
2	735	230	203	24	68	8.4	*1.0	*1.0	3.0	11	8.3	58
3	504	200	156	25	64	6.7	*1.0	*1.0	2.9	7.4	7.0	100
4	*328	169	127	26	51	6.9	*1.0	*1.0	2.9	11	6.1	81
5	246	151	111	27	45	4.0	*1.0	*1.0	2.9	14	7.1	59
6	204	142	99	26	41	3.4	*1.0	*1.0	2.9	15	6.8	64
7	171	128	97	38	*35	4.4	*1.0	*1.0	2.9	14	11	429
8	154	127	100	32	44	4.1	*1.0	*1.0	2.8	12	11	352
9	154	115	99	22	69	*1.5	*1.0	*1.0	2.8	12	12	257
10	408	105	109	16	76	*1.5	*1.0	*1.0	2.8	9.9	10	266
11	578	97	104	9.9	51	*1.5	*1.0	*1.0	2.8	9.8	8.4	185
12	356	94	97	7.8	30	*1.5	*1.0	*1.0	2.8	21	7.0	*141
13	260	91	91	11	19	*1.5	*1.0	*1.0	3.2	34	7.8	*112
14	214	85	89	10	18	*1.5	*1.0	*1.0	6.2	30	9.0	*89
15	194	81	90	6.2	18	*1.5	*1.0	*1.0	6.2	26	21	78
16	496	78	85	5.0	13	*1.5	*1.0	*1.0	19	24	61	72
17	898	*84	77	4.8	13	*1.5	*1.0	*1.0	40	22	68	82
18	857	*90	80	19	12	*1.5	*1.0	*1.0	56	19	91	100
19	1100	80	77	100	9.5	*1.5	*1.0	*1.0	50	17	96	*500
20	1030	73	69	102	8.8	*1.5	*1.0	*1.0	61	17	67	*4000
21	752	72	64	81	8.8	*1.5	*1.0	*1.0	58	18	52	*1300
22	574	69	59	160	9.8	*1.5	*1.0	*1.0	46	18	63	*3400
23	438	66	56	258	9.1	*1.5	*1.0	*1.0	35	16	70	*6400
24	351	65	56	138	7.2	*1.5	*1.0	*1.0	29	15	60	*3000
25	294	63	52	85	6.0	*1.5	*1.0	*1.0	28	14	51	*1200
26	256	65	46	75	5.2	*1.5	*1.0	3.0	29	13	51	*3200
27	229	130	42	83	5.1	*1.5	*1.0	3.2	19	10	47	*1650
28	205	553	39	64	6.6	*1.5	*1.0	3.0	15	8.8	39	*820
29	188		35	48	4.7	*1.5	*1.0	4.1	16	9.1	46	*660
30	184	—	34	44	4.0	*1.5	*1.0	3.2	12	11	49	*600
31	176	—	33	—	6.2	—	*1.0	3.7	—	10	—	*500
Mean	421	125	90.2	52.6	26.2	2.7	1.0	1.5	18.8	15.5	35.1	961
Ac-Ft	25910	6918	5546	3129	1611	159	61	90	1118	950	2088	59110

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 106690 Water Year 77538

Division of Water Resources Station located approximately three and one-half miles northeast of Verona on El Centro Road. Station was moved to this new location on June 30, 1954. Natomas Cross Canal is an east-side tributary to the Sacramento River at Mile 19.6L. Period of record 1949 to date.
* Estimated

TABLE 84

FLOW OF RECLAMATION DISTRICT 1001 DRAIN INTO NATOMAS CROSS CANAL(e) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	0	0	36							
2	22	0	26	0	32							
3	0	0	0	0	26							
4	38	32	0	0	26							
5	0	0	0	0	19							
6	0	0	0	0	0							
7	0	0	26	0	0							
8	0	0	0	0	26							
9	26	0	0	0	16							
10	29	0	0	0	16							
11	22	0	0	0	16							
12	0	0	0	0	0							
13	29	0	26	0	0	N	N	N	N	N	N	N
14	0	0	0	0	29	O	O	O	O	O	O	O
15	0	0	0	0	19							
16	32	29	0	0	0							
17	60	0	0	0	19	F	F	F	F	F	F	R
18	55	0	0	0	0	L	L	L	L	L	L	E
19	147	0	0	0	46	O	O	O	O	O	O	C
20	98	26	0	0	32	W	W	W	W	W	W	O
21	76	0	0	0	36							R
22	27	0	0	52	29							D
23	25	0	0	0	32							
24	0	0	0	41	26							
25	26	0	0	25	23							
26	0	32	0	19	23							
27	19	0	0	25	0							
28	29	0	0	0	0							
29	0		0	0	0							
30	0	—	0	0	0							
31	29	—	0	—	0	—			—		—	
Mean	25.4	4.2	2.5	5.4	17.0	0	0	0	0	0	0	
Ac-Ft	1565	236	155	321	1045	0	0	0	0	0	0	

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year 5361

This is drainage return to the Sacramento River via the cross canal by pumping and gravity. Period of record 1940 to date. Records for 1954 computed by Division of Water Resources.
(e) Natomas Cross Canal is the main drain between Reclamation Districts 1000 and 1001 and joins the Sacramento River at Mile 19.6L.

TABLE 85

FLOW OF RECLAMATION DISTRICT 1000 DRAIN (PRITCHARD LAKE) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0		0				0		10	10		0
2	0		0				0		10	10		0
3	0		11				0		10	10		0
4	0		0				0		10	5.0		0
5	0		0				0		10	0		0
6	0		0				0		10	0		0
7	0		0				0		10	0		0
8	0		0				0		10	0		0
9	0		0				0		14	0		0
10	0		0				0		18	0		0
11	0		0				0		22	0		0
12	0		0				0		26	0		0
13	0	N	0	N	N	N	0	N	30	0	N	0
14	0	0	0	0	0	0	0	0	34	0	0	0
15	0	/	/				0		39	0		0
16	0		0				0		38	0		0
17	0	F	0	F	F	F	0	F	37	0	F	0
18	5.0	L	0	L	L	L	0	L	37	0	L	0
19	62	0	0	0	0	0	0	0	36	0	0	149
20	45	W	0	W	W	W	0	W	38	0	W	164
21	30		0				0		40	0		156
22	0		0				0		42	0		141
23	0		0				0		36	0		126
24	0		0				0		30	0		140
25	0		0				0		24	0		140
26	0		0				0		18	0		140
27	0		0				6.0		17	0		140
28	0		0				6.0		15	0		140
29	0		0				0		14	0		134
30	0	—	0				0		12	0		134
31	0	—	0	—		—	0		—	0	—	70
Mean	4.6	0	0.4	0	0	0	0.4	0	23.2	1.1	0	57.2
Ac-Ft	282	0	22	0	0	0	24	0	1380	69	0	3520

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 5297 Water Year

This is drainage from Reclamation District 1000 returned to the Sacramento River by pumping and gravity at Mile 16.0L. Additional water was returned to the Sacramento River at Mile 6.85L (see Table 86) and at Mile 2.1L (see Table 88). Records for 1955 computed by Division of Water Resources.

TABLE 86

FLOW OF RECLAMATION DISTRICT 1000 DRAIN (#3 PLANT) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15	Records sufficient to compute only monthly flows.											
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30		—										
31		—		—		—			—		—	
Mean	0.4	7.0	6.7	9.4	27.1	30.1	33.4	50.7	47.8	18.2	11.9	29.7
Ac-Ft	28	388	414	560	1665	1789	2057	3116	2844	1118	709	1829

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 15517 Water Year 15128

This is drainage from Reclamation District 1000 return to Sacramento River by pumping and gravity at Mile 6.85L. Daily distribution of flows are not available since the plant operates automatically on float switch. Additional water was returned to Sacramento River from same district at Mile 2.1L (see Table 88) and Mile 16.0L. Period of record 1940 to date. Records for 1955 computed by Division of Water Resources.

TABLE 87

FLOW OVER SACRAMENTO WEIR FROM SACRAMENTO RIVER TO YOLO BY-PASS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13	N	N	N	N	N	N	N	N	N	N	N	0
14	O	O	O	O	O	O	O	O	O	O	O	0
15												0
16												0
17	F	F	F	F	F	F	F	F	F	F	F	0
18	L	L	L	L	L	L	L	L	L	L	L	0
19	O	O	O	O	O	O	O	O	O	O	O	0
20	W	W	W	W	W	W	W	W	W	W	W	0
21												0
22												0
23												19600
24												48800
25												43500
26												45700
27												45200
28												36400
29												27200
30		—										19400
31		—		—		—			—		—	11400
Mean												9587
Ac-Ft												589500

Maximum Discharge	Calendar year 57,400 c.f.s. December 23, 1955 of record *118,000 c.f.s. March 26, 1928	Total Runoff in Acre-Feet	Calendar Year 589500 Water Year 0

Station is located on Sacramento River at Mile 4.2R above Sacramento. Elevation of fixed crest is 25.0 U. S. E. D. datum. Moveble crest (top of needles) 31.0 U. S. E. D. datum. Weir has 48 gates, each 38 feet in length. Period of record 1926 to date. Records for 1955 computed by Division of Water Resources.
* Estimated

TABLE 88

FLOW OF RECLAMATION DISTRICT 1000 DRAIN (2ND BANNON SLOUGH) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	52	65	0	0	0	70		0	35	64		0
2	55	0	0	0	66	70		0	33	0		0
3	63	67	0	0	0	70		0	38	0		0
4	45	64	60	0	0	70		0	42	0		0
5	0	52	67	0	0	14		0	38	0		0
6	0	0	0	0	0	0		0	63	0		0
7	0	0	66	0	0	0		0	0	0		0
8	66	0	0	0	0	0		0	49	0		0
9	0	0	0	0	0	0		0	31	0		0
10	66	0	0	0	138	0		0	30	0		0
11	66	0	0	0	0	0		0	28	0		0
12	0	0	68	0	0	0		0	35	0		0
13	0	0	0	0	25	0	N	0	35	0	N	0
14	56	0	0	0	28	0	0	0	54	0	0	0
15	116	0	0	0	0	0		0	253	0		0
16	91	29	0	0	0	0		0	166	0		0
17	67	65	0	0	0	0	F	0	187	0	F	0
18	325	0	0	0	54	0	L	0	202	0	L	0
19	245	0	0	0	28	0	O	0	252	0	O	597
20	164	0	0	0	21	0	W	0	243	0	W	666
21	161	0	0	42	24	0		0	164	0		532
22	52	112	0	70	32	0		0	225	0		560
23	56	0	0	66	0	0		0	164	0		583
24	66	88	0	0	0	0		23	170	0		593
25	68	57	0	63	0	0		0	162	0		593
26	68	0	0	66	0	0		0	62	0		594
27	68	46	0	0	39	0		21	41	0		599
28	65	62	0	0	0	0		0	65	0		601
29	63		0	66	51	0		0	54	0		483
30	56	—	0	66	39	0		21	0	0		292
31	61	—	0	—	70	—		0	—	0	—	199
Mean	72.9	25.2	8.4	14.6	19.8	9.8	0	2.1	97.7	2.1	0	222
Ac-Ft	4485	1402	518	871	1220	583	0	129	5814	127	0	13670

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 23819 Water Year 26913

This is drainage from Reclamation District 1000 returned to the Sacramento River by pumping at Mile 2.1L. Additional water was returned to the Sacramento River at Mile 6.85L (see Table 86) and Mile 16.0L. Period of record 1925 to date. Records for 1955 computed by Division of Water Resources.

TABLE 89

FLOW OF LINDA CREEK NEAR ROSEVILLE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34	127	116	32	62	*20	16	7.5	20	24	26	52
2	23	118	108	33	67	*19	16	8.5	18	24	28	72
3	10	94	90	33	60	18	17	9.0	17	23	28	45
4	101	58	79	36	55	20	20	9.4	18	26	28	39
5	65	87	66	31	56	20	21	9.9	16	25	25	45
6	90	3	74	34	52	21	20	10	16	25	27	246
7	86	86	76	*32	53	21	20	11	15	25	26	236
8	1	90	67	*33	74	22	20	11	16	25	27	123
9	107	9	67	*34	69	22	20	12	16	26	26	185
10	20	88	69	*35	59	22	21	13	17	31	22	118
11	110	95	61	*36	52	22	20	13	17	60	26	75
12	91	79	56	37	47	20	20	14	18	52	28	61
13	96	74	55	*38	45	18	19	13	19	43	35	52
14	1	75	54	*39	42	18	17	12	24	40	51	46
15	132	73	53	40	40	20	16	13	39	35	44	*46
16	525	1	47	40	40	20	15	12	37	30	39	*52
17	241	100	45	56	35	20	14	13	37	30	87	*66
18	538	79	45	125	28	19	15	13	38	31	59	*114
19	566	62	44	100	26	18	*14	14	39	32	44	*2000
20	352	60	44	79	*26	19	*14	13	36	33	44	*1100
21	236	62	40	120	*25	18	*13	18	35	31	54	*363
22	177	60	38	165	*24	18	*13	14	32	32	48	*1820
23	147	0	38	80	*22	18	*13	14	33	32	*43	*2900
24	133	62	42	65	*22	13	*13	14	34	29	*43	*840
25	123	61	34	66	*22	17	*12	14	32	27	40	*280
26	113	71	37	70	*21	16	*12	15	32	30	34	*1170
27	107	373	37	65	*20	16	*11	18	30	32	32	*560
28	106	173	54	54	*20	16	*11	19	33	32	31	*420
29	99		40	54	*20	16	10	22	33	32	31	*350
30	96	—	43	66	*20	16	9.9	22	30	28	31	*280
31	98	—	42	—	*20	—	8.5	21	—	27	—	*375
Mean	183	93.9	66.1	67.9	30.5	19.0	15.5	13.6	26.6	31.4	36.9	456
Ac-Ft	11230	5216	3447	3443	2428	1129	955	838	1581	1928	2196	28030

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	62421
			Water Year	44415

Division of Water Resources station located near Southern Pacific Railroad bridge 0.6 mile downstream from Auburn Boulevard (Old Highway 99E). Linda Creek is an east-side tributary to the Sacramento River at Mile 1.3L via the Back Borrow Pit of Reclamation District 1000. Period of record 1949 to date.

* Estimated

TABLE 90

FLOW OF NORTH FORK AMERICAN RIVER AT NORTH FORK DAM - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1890	634	489	925	1080	1090	200	67	37	37	34	218
2	1380	539	464	865	1060	985	188	63	37	37	34	315
3	805	448	448	735	1070	1050	182	60	34	37	40	200
4	582	392	440	670	1220	1110	182	60	34	37	46	159
5	489	368	432	616	1430	1330	170	60	34	37	37	148
6	432	346	416	599	1870	1360	159	56	34	37	37	1500
7	376	330	424	652	2110	1320	154	56	32	37	34	1080
8	346	323	464	725	2180	1270	148	53	34	37	34	531
9	330	323	539	845	2330	1180	143	50	34	37	34	643
10	338	315	855	985	2240	1060	143	46	34	40	34	652
11	300	315	745	915	2200	915	138	46	34	40	34	448
12	279	308	706	815	2270	795	133	46	34	40	34	384
13	272	308	679	835	2200	725	123	43	32	40	46	346
14	258	315	634	755	1800	661	118	43	37	37	83	308
15	286	323	582	715	1390	582	113	43	40	37	75	279
16	415	346	539	765	1190	514	113	43	40	37	67	286
17	408	690	514	1060	1150	464	113	43	43	37	108	477
18	464	830	489	1100	1420	432	108	43	43	37	91	880
19	522	591	473	915	1720	408	104	46	43	37	87	7880
20	489	498	464	885	1940	376	99	43	43	37	118	9310
21	424	448	440	1100	2110	353	95	40	40	37	521	5940
22	334	408	424	1780	1980	338	91	43	40	40	315	34600
23	376	384	424	1390	1910	323	87	40	40	40	182	41600
24	376	361	432	1410	1820	300	83	40	40	37	154	14700
25	376	346	489	1400	1490	279	79	37	40	37	118	6550
26	376	353	550	1340	1390	265	75	37	37	37	108	9880
27	376	548	634	1200	1360	258	79	37	37	37	99	7920
28	368	539	998	1220	1390	230	75	37	37	40	99	4740
29	368		1310	1140	1550	224	71	37	37	40	108	3340
30	376	—	1210	1110	1640	212	71	37	37	40	108	2540
31	416	—	955	—	1420	—	67	37	—	37	—	2170
Mean	480	42	602	982	1674	680	119	46.2	37.3	37.9	97.3	5102
Ac-Ft	29510	3860	37030	58450	102900	40480	7350	2840	2220	2330	5790	317400

Maximum Discharge	Calendar year 49,[illegible] c.f.s. December 24, 1955 of record 49,10[illegible] c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year	629960
			Water Year	341500

U. S. Geological Survey and Division of Water Resources cooperative station located on left bank 50 feet upstream from spillway of North Fork Dam, and approximately four miles northeast of Auburn. Drainage area is 343 square miles. Period of record 1941 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 91

FLOW OF MIDDLE FORK AMERICAN RIVER NEAR AUBURN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2520	747	688	1720	1640	2060	442	115	68	55	66	247
2	1990	652	663	1640	1630	1780	416	110	66	55	64	390
3	1120	561	646	1380	1680	1980	403	104	64	55	65	300
4	822	516	635	1230	2000	2100	390	101	62	54	66	242
5	691	501	621	1120	2450	2730	369	100	61	54	65	213
6	610	474	600	1070	3420	2910	345	98	59	55	62	1920
7	543	455	604	1130	4080	2890	324	97	58	55	60	1600
8	489	446	663	1260	4440	2880	309	95	57	54	60	760
9	474	449	796	1540	4520	2680	297	93	57	54	60	936
10	486	458	1250	1860	4400	2530	294	88	58	55	59	948
11	452	463	1100	1790	4370	2170	288	86	58	58	57	620
12	416	477	1080	1540	4500	1840	273	85	58	62	56	515
13	406	480	1030	1600	4640	1620	270	84	57	62	65	484
14	398	486	966	1500	3600	1410	258	83	60	61	104	438
15	416	525	902	1420	2560	1250	250	82	65	59	108	403
16	576	558	818	1540	2100	1080	239	84	72	56	93	403
17	522	1110	775	1930	1990	960	231	97	73	55	151	634
18	585	1620	740	1790	2520	920	223	84	74	55	132	1210
19	632	1070	736	1430	3220	892	213	78	73	55	136	8270
20	585	878	750	1340	4110	880	197	77	71	56	170	11000
21	519	758	726	1580	4430	832	182	75	70	66	634	7420
22	480	688	691	2190	4390	788	172	74	67	69	532	51000
23	469	638	691	1970	4150	760	165	74	66	68	288	67400
24	474	600	722	2180	3970	680	160	72	63	71	228	26200
25	483	576	830	2310	2940	606	151	73	59	67	179	11300
26	489	591	1010	2140	2620	571	142	73	58	64	156	15500
27	498	818	1170	1800	2520	560	138	72	56	71	145	12300
28	498	691	2010	1840	2690	532	134	72	56	78	145	7140
29	495		2610	1760	3090	508	128	73	55	79	165	5330
30	516	—	2330	1660	3530	464	122	71	55	73	179	3800
31	549	—	1800	—	2980	—	118	69	—	67	—	3650
Mean	652	653	989	1642	3264	1462	247	85.1	62.5	61.2	145	7825
Ac-Ft	40070	36270	60800	97710	200700	87000	15160	5230	3720	3760	8630	481100

Maximum Discharge	Calendar year 79,000 c.f.s. December 23, 1955 of record 79,000 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 1040150 Water Year 599290

U. S. Geological Survey and Diversion of Water Resources cooperative station located on left bank 1.9 miles upstream from mouth and approximately 3.5 miles northeast of Auburn. Drainage area is 619 square miles. Period of record 1911 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 92

FLOW OF SOUTH FORK AMERICAN RIVER NEAR LOTUS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2680	806	585	1110	1330	1910	362	175	155	179	153	228
2	1820	610	597	1140	1320	1650	348	179	146	177	150	355
3	966	475	585	974	1200	1860	334	177	143	173	148	260
4	661	428	539	902	1360	1920	334	177	152	165	150	232
5	574	442	506	776	1610	2350	306	165	152	171	148	184
6	506	419	491	748	2120	2450	300	163	143	173	146	1530
7	389	378	470	798	2520	2450	284	161	141	173	148	1230
8	381	359	517	894	2780	2450	232	161	139	173	148	604
9	366	355	616	1070	2800	2450	254	161	141	173	146	674
10	410	355	902	1340	2960	2260	263	155	148	173	111	680
11	378	355	830	1230	3060	1820	260	153	148	179	136	437
12	334	366	870	1080	3190	1540	246	150	148	182	128	381
13	340	359	769	1160	3200	1400	234	137	144	159	134	348
14	330	370	727	1120	2630	1610	240	150	150	139	159	310
15	355	389	727	1080	1970	1270	231	144	152	146	173	294
16	700	428	610	1190	1610	1060	234	153	152	136	165	310
17	539	931	591	1530	1520	910	221	146	146	134	210	393
18	720	1320	585	1590	1980	846	208	144	157	136	213	787
19	790	878	579	1270	2560	838	208	144	161	134	205	3730
20	661	741	562	1150	3070	814	203	152	165	150	218	5110
21	556	648	545	1300	3410	790	205	159	167	153	410	3240
22	501	562	528	2090	3530	707	208	152	157	146	412	33300
23	470	522	539	1550	3500	674	200	153	169	146	263	62400
24	456	491	550	1610	3360	622	193	153	175	148	229	23200
25	442	475	622	1620	2430	533	184	153	184	148	203	8440
26	419	480	734	1600	2350	491	177	148	182	105	179	10500
27	402	967	854	1420	2120	470	182	155	179	143	198	8600
28	381	713	1210	1460	2350	451	188	155	182	155	171	4880
29	381		1630	1420	2810	423	200	153	177	157	179	3630
30	398	—	1490	1420	3140	402	184	155	175	155	188	2980
31	451	—	1150	—	2780	—	193	159	—	153	—	2700
Mean	605	558	726	1255	2472	1317	239	156	158	156	187	5869
Ac-Ft	37200	30990	44650	74660	152000	78390	14710	9600	9380	9590	11150	360900

Maximum Discharge	Calendar year 71,800 c.f.s. December 23, 1955 of record 71,800 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 833220 Water Year 501610

U. S. Geological Survey station located on left bank 0.4 miles downstream from Greenwood Creek and approximately 2.4 miles northwest of Lotus. Drainage area is 678 square miles. Period of record 1951 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 93

FLOW OF WEBER CREEK NEAR SALMON FALLS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	913	156	168	28	135	9.6	2.9	0.3	0	0.5	1.7	18
2	434	119	129	27	143	9.2	2.7	0.2	0	0.5	1.8	25
3	177	92	107	26	114	7.9	2.5	0.2	0	0.5	2.6	15
4	111	79	93	24	98	7.2	2.7	0.2	0	0.6	3.4	13
5	85	72	81	22	83	6.8	3.1	0.2	0	0.8	3.5	12
6	69	67	71	19	72	6.4	3.2	0.2	0	0.6	3.5	156
7	58	61	65	19	73	6.0	2.5	0.1	0	0.5	3.6	67
8	52	56	61	20	101	5.4	2.2	0.1	0	0.4	4.2	35
9	50	55	66	18	77	4.2	2.0	0.1	0	0.4	4.0	47
10	70	52	74	17	62	3.6	1.9	0	0	0.4	3.6	40
11	53	49	63	17	53	4.7	1.9	0	0	0.4	4.0	28
12	47	47	57	17	47	4.6	1.6	0	0	0.6	4.1	22
13	44	44	53	16	41	4.8	1.4	0	0	0.7	6.4	19
14	42	43	50	14	36	5.2	1.2	0	0	0.8	21	17
15	55	42	46	13	34	5.0	1.0	0	0	0.8	14	16
16	419	46	41	13	32	5.4	0.9	0	0	0.8	9.4	18
17	168	74	40	79	30	5.0	1.1	0	0	0.8	23	22
18	415	64	40	208	28	4.6	1.0	0	0	0.8	18	45
19	596	53	40	168	26	3.8	0.9	0	0	0.8	13	883
20	334	49	38	110	25	3.4	0.9	0	0.4	0.9	12	686
21	211	45	37	240	23	3.1	0.9	0	1.1	0.9	22	309
22	171	43	36	457	25	2.5	1.0	0	1.1	1.0	17	5540
23	142	41	35	190	22	2.2	0.8	0	1.2	1.1	12	7160
24	122	40	34	134	21	2.3	0.5	0	1.1	1.4	14	2760
25	109	39	32	123	20	2.5	0.5	0	0.9	1.3	12	809
26	95	42	31	172	16	2.6	0.7	0	1.1	1.3	11	2250
27	85	755	29	134	13	2.9	0.9	0	1.1	1.4	9.9	1030
28	75	276	32	118	12	3.1	0.8	0	0.9	1.5	9.4	500
29	75		31	107	12	2.9	0.6	0	0.8	1.5	8.4	340
30	77	—	33	132	9.9	2.9	0.6	0	0.7	1.5	8.2	263
31	82	—	30	—	9.9	—	0.4	0	—	1.7	—	267
Mean	175	92.9	56.2	89.4	48.2	4.7	1.5	0.1	0.4	0.9	9.4	755
Ac-Ft	10780	5160	3460	5320	2960	278	90	3	21	54	557	46440

Maximum Discharge	Calendar year 11,800 c.f.s. December 23, 1955 of record 11,800 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 75123 Water Year 36030

U. S. Geological Survey and Division of Water Resources cooperative station located on left bank one mile upstream from mouth, 3.9 miles east of Salmon Falls. Drainage area is 100 square miles. Period of record 1943 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 94

INFLOW TO FOLSOM RESERVOIR - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1			2130	3550	4660	5250	918	660	413	547	394	1060
2			1990	3700	5100	4620	1190	453	644	607	516	1580
3			1910	3260	4410	5490	827	343	439	457	688	1180
4			2520	2860	4700	5270	1200	347	555	484	557	978
5			1930	2670	5970	6620	810	501	498	535	639	946
6			1810	2610	7560	7570	503	535	339	490	605	5000
7			1790	2210	9120	6210	799	431	172	672	639	5190
8			1950	3020	9850	7270	1000	620	317	489	635	2580
9			2280	3330	10640	6890	829	465	342	438	633	2650
10			3450	3540	10170	6980	530	210	191	672	637	2890
11			3200	4410	10010	5420	650	400	232	613	591	1990
12			3090	3760	10550	4380	780	417	257	672	513	1650
13			2970	3400	10220	3940	766	164	295	505	706	1430
14			2750	3660	9250	4050	829	472	367	481	768	1710
15			2720	3090	7130	3210	425	228	398	372	721	1380
16			2320	3300	5230	2710	351	231	553	629	872	1500
17			2160	4940	4930	2300	427	272	347	712	874	1770
18			2230	4130	4090	2110	613	524	520	600	885	3440
19			2640	4390	6820	2490	972	258	521	551	819	20010
20			2140	3780	8840	2550	566	344	444	540	881	28240
21			2160	4500	10680	2090	657	316	447	636	1840	17550
22			2080	7160	10180	1950	461	409	602	601	2200	125670
23			1920	5550	10050	1900	541	268	653	613	1190	189100
24		1650	2010	5230	9950	1470	571	430	641	720	976	67690
25		1190	2100	5620	7590	1460	554	451	6681	677	1000	26450
26		1390	2560	5100	6170	1470	271	257	553	567	762	33860
27		3440	3090	4920	6190	1150	298	511	585	603	763	30000
28		2360	2140	4020	5960	1320	318	603	510	604	775	18550
29			2240	4230	7690	940	569	636	364	613	875	14280
30		—	5260	4490	3830	1360	628	681	542	631	792	11300
31		—	4280	—	7120	—	632	426	—	715	—	9180
Mean			2660	4130	7011	3672	670	430	449	586	825	20512
Ac-Pt			16411	24501	43091	21930	41260	26460	26780	36010	49080	1261220

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year

These quantities are the daily mean accumi-feet inflow to Folsom Reservoir as computed by the U. S. Bureau of Reclamation, taking into account change in storage, release, spill, precipitation, and evaporation; and are representative of the natural flow at the dam site if the dam had not been constructed. Drainage area is 1875 square miles. Beginning of record for strata February 4, 1955.

(a) 24-hour avg.

(b) 24-hour avg.

TABLE 95

DAILY CONTENT OF FOLSOM RESERVOIR IN ACRE-FEET - 1955

Date	Storage at end of day in Thousands of Acre-Feet											
	Jan.	Feb.	Merch	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1			5.3	78.7	244.4	448.5	426.9	339.7	218.3	178.2	159.6	173.5
2			5.5	35.4	245.4	450.0	425.4	335.3	214.4	177.9	159.2	175.2
3			4.9	91.2	244.9	453.0	423.2	332.8	210.2	176.4	159.0	177.4
4			5.0	96.2	245.4	455.3	421.8	329.7	206.1	175.0	158.7	179.2
5			4.9	100.8	240.3	455.3	420.3	326.6	202.0	173.6	159.8	179.3
6			4.8	105.3	254.3	451.5	418.9	323.0	198.0	172.2	160.8	187.3
7			4.8	109.1	263.4	450.0	418.1	318.3	194.0	171.1	160.5	195.6
8			5.1	114.5	273.9	453.0	417.4	315.7	190.5	169.7	160.2	199.2
9			6.0	120.6	283.1	453.8	416.0	311.0	189.0	169.7	159.9	203.0
10			9.5	127.0	292.0	453.0	416.7	305.7	187.1	168.3	159.6	208.5
11			9.6	135.1	303.9	451.5	413.8	302.2	185.2	166.9	159.2	212.4
12			10.3	141.9	318.7	450.7	410.2	298.8	184.5	165.6	160.0	213.5
13			10.0	148.0	332.8	450.7	407.4	294.0	183.7	163.9	161.2	214.3
14			9.8	154.6	344.7	451.5	404.6	291.4	182.6	162.5	161.2	216.0
15			9.9	159.9	352.4	450.7	401.0	287.5	181.9	161.5	161.1	217.1
16			9.5	165.6	356.3	450.0	398.2	283.6	181.5	161.9	161.3	218.3
17			9.	174.6	359.6	450.0	394.7	279.8	181.5	160.8	161.2	221.7
18			10.2	183.4	365.5	448.5	391.9	275.5	180.8	159.5	161.6	228.4
19			10.2	191.3	376.9	447.7	389.0	271.2	180.3	158.9	163.1	266.3
20			10.4	198.0	388.5	447.0	385.7	267.6	180.8	158.5	164.7	320.4
21			12.6	206.1	404.6	445.4	383.0	264.4	180.8	158.2	166.8	352.9
22			16.0	216.6	419.6	443.9	380.9	261.3	181.1	159.2	169.6	383.9
23			19.1	222.3	434.2	443.2	376.9	256.8	181.5	160.2	170.4	865.1
24		0	22.3	227.2	443.9	441.7	372.8	252.3	181.0	159.9	170.8	366.3
25		0.3	25.9	233.1	448.5	440.2	368.8	247.8	181.5	159.5	171.1	784.4
26		2.9	30.3	239.2	450.0	438.7	364.2	243.5	181.1	158.9	172.5	727.8
27		5.9	35.1	243.5	450.7	437.2	359.6	239.2	180.8	158.4	173.9	669.0
28		5.1	42.3	245.9	451.5	435.0	355.0	235.0	180.1	158.5	173.7	608.7
29			53.1	245.4	452.2	432.0	351.1	230.8	179.0	159.5	173.4	561.2
30		—	63.7	244.9	454.5	429.8	347.3	226.7	178.0	160.4	173.1	531.6
31		—	71.5	—	451.5	—	343.5	222.7	—	160.4	—	520.4
Monthly Change			+66.4	+173.4	+206.6	-21.7	-86.3	-120.8	-44.1	-18.2	+12.7	+347.3

Annual gain or loss in storage: Calender Year +520,400*; Water Year +178,600* (Acre-Feet)

* Incomplete year beginning of storage at 3:00 P.M. on February 25, 1955.
Records for 1955 computed by U. S. Bureau of Reclamation.

TABLE 96

FLOW OF AMERICAN RIVER AT FAIR OAKS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	Merch	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7260	2480	2170	315	4720	6920	1990	2420	2370	545	538	582
2	8710	2760	2030	315	4420	3400	1670	2430	2390	552	522	621
3	4360	2200	2030	327	3180	3580	1660	1540	2390	886	545	613
4	3090	1860	2230	339	3980	4080	1680	1530	2400	1070	560	590
5	2520	1800	2100	339	4460	6580	1360	1520	2430	1070	545	590
6	2230	1790	2020	333	4280	9380	1070	2370	2230	1100	530	621
7	2040	1130	1900	219	4420	6760	1030	2310	2100	1080	538	621
8	1810	1500	1910	170	4440	5600	1010	2310	1940	1070	515	661
9	1710	1490	1930	170	5090	6040	958	2530	1080	1070	522	677
10	1890	1480	2160	201	5340	5980	966	2310	1070	1070	515	677
11	1800	1430	2610	201	3630	6060	1190	2090	1060	1080	560	637
12	1580	1480	2720	195	2770	4480	1670	2070	582	1060	485	629
13	1580	1450	3080	175	2880	3810	1860	2070	568	1050	470	621
14	1580	1330	2930	170	2870	3440	1960	2110	568	1040	522	653
15	1550	1290	2700	249	2940	3380	1950	2060	568	1040	530	637
16	2930	1460	2670	185	2840	2760	1950	1960	560	1040	568	629
17	2660	1970	2230	160	2800	2620	1840	1950	568	1020	560	629
18	3020	4010	2110	175	3000	3090	1830	1930	582	1010	552	613
19	4200	2940	2120	185	2870	2490	1960	1920	582	552	522	685
20	3470	2320	2140	185	2800	1390	2260	1930	478	545	568	773
21	2660	2000	1340	190	2350	2960	1990	1930	522	545	582	321
22	2340	1830	438	1200	2440	2400	468	1930	522	545	582	6910
23	2150	1650	399	2730	2530	1690	2320	2300	515	538	598	47300
24	2080	1590	411	2960	4640	1690	2350	2470	515	538	575	69300
25	2040	1060	417	2970	5070	1980	2300	2400	533	533	575	68500
26	1990	278	273	2800	5430	1900	2350	2420	545	545	605	67900
27	1970	1550	560	2690	5470	1710	2360	2440	545	538	575	60400
28	1890	3140	602	3840	6110	2140	2330	2440	552	530	575	47600
29	1830		315	4580	6950	2100	2330	2490	552	530	575	35000
30	1830	—	357	4720	7120	2110	2370	2310	545	530	582	24800
31	1960	—	357	—	8600	—	2420	2400	—	530	—	14000
Mean	2669	1831	1654	1110	4236	3767	1779	2158	1057	802	550	14690
Ac-Ft	164100	101700	101700	66030	260500	224200	109400	132700	62910	49300	32710	903100

Maximum Discherge	Calender year 71,500 c.f.s. December 24, 1955 of record 180,000 c.f.s. November 21, 1950	Total Runoff in Acre-Feet	Calender Year 2,208350 Water Year 1428370

U. S. Geological Survey station located on right bank at Mile 19.2 above mouth. These flows include releases from Folsom Reservoir, after February 25, 1955. Drainage area is 1921 square miles. Period of record 1904 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 97

FLOW OF AMERICAN RIVER AT SACRAMENTO (H ST. BRIDGE) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6180	2280	2220	342	5160	7860	2140	2300	2300	539	531	582
2	9240	2850	1920	342	4840	2900	1690	2340	2300	555	547	618
3	4760	2280	1950	354	3790	3380	1690	1530	2290	712	515	618
4	3210	1910	2230	368	4060	3610	1730	1510	2300	1000	547	600
5	2560	1730	2040	361	4540	5900	1560	1500	2290	1000	547	600
6	2240	1780	1980	354	4190	8900	1130	2240	2170	1010	523	627
7	2050	1320	1830	317	4310	7370	1100	2240	1940	1010	515	627
8	1780	1330	1840	195	4310	5180	1080	2160	1940	1000	499	664
9	1690	1470	1870	170	5550	6050	1040	2440	2340	990	507	683
10	1830	1460	1970	205	5520	6210	1040	2320	1000	1010	483	683
11	1780	1430	2560	220	4310	6230	1160	1990	990	1000	539	654
12	1560	1460	2630	195	2740	4480	1650	2010	674	990	491	627
13	1540	1450	3020	185	2940	3890	1940	1990	539	980	475	645
14	1510	1320	2960	138	2900	3380	1920	2010	539	980	499	654
15	1470	1280	2680	210	2960	3450	1920	2010	531	980	507	664
16	2610	1340	2640	215	3040	2890	1920	1900	523	980	539	636
17	2790	1690	2260	138	2770	2410	1910	1880	539	970	539	654
18	2740	3930	2040	166	3010	3210	1910	1850	539	970	547	636
19	4210	3200	2040	166	2990	2520	1980	1840	491	654	515	712
20	3660	2400	2060	175	2820	1900	2360	1840	422	539	523	382
21	2800	2050	1640	190	2350	2790	2360	1850	499	539	573	209
22	2380	1870	515	593	2380	2760	500	1850	491	531	564	4410
23	2140	1640	408	2320	2380	1680	1980	2110	491	523	591	41600
24	2050	1640	430	2560	4190	1690	2230	2410	499	531	573	69200
25	2020	1340	468	2680	4960	1990	2200	2350	507	531	555	70300
26	1980	317	281	2760	5460	1920	2220	2380	523	539	573	70800
27	1920	1120	475	2640	5630	1690	2280	2400	523	531	573	60400
28	1850	3290	740	3550	5900	2230	2180	2400	523	531	555	47600
29	1780		335	4980	7350	2230	2170	2480	531	523	573	35000
30	1780	—	354	5100	7050	2200	2260	2260	531	523	573	24800
31	1880	—	387	—	8680	—	2320	2340	—	523	—	14000
Mean	2645	1828	1638	1073	4293	3763	1793	2088	1059	764	536	14540
Ac-Ft	162700	101500	100700	63830	264000	223900	110200	128400	63020	47000	31920	894300

Maximum Discharge	Calendar year 72,100 c.f.s. December 2, 1955 of record 176,000 c.f.s. November 21, 1950	Total Runoff in Acre-Feet	Calendar Year 2191370 Water Year 1423230

Station is maintained jointly by Division of Water Resources and the U. S. Geological Survey. Station is located at the "H" Street Bridge and is 6.0 miles above the mouth. The American River flows into the Sacramento River at Mile 1.1L. Period of record 1921, 1926 to date. Record for 1955 computed by U. S. Geological Survey.

TABLE 98

FLOW OF BEAR CREEK NEAR RUMSEY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1										0.9	1.2	0.9
2										1.1	1.1	2.1
3										1.2	1.1	1.2
4										1.2	1.1	0.7
5										1.2	1.1	1.2
6										1.2	1.1	26
7										1.1	1.1	13
8										1.1	0.9	4.6
9										1.1	0.8	7.2
10										1.2	0.8	5.9
11										1.5	0.8	3.7
12										1.5	0.9	2.8
13										1.2	1.6	2.8
14										1.1	2.4	2.6
15										1.1	2.1	2.6
16									*1.3	1.1	1.6	3.7
17									1.5	1.1	2.2	5.0
18									2.6	1.1	2.4	420
19									2.4	1.2	2.1	4440
20									1.5	1.2	1.8	917
21									1.3	1.3	2.2	832
22									1.5	1.3	2.1	2820
23									1.3	1.3	1.5	2030
24									1.3	1.2	2.1	318
25									0.9	1.2	2.1	151
26									0.8	1.2	1.2	1190
27									0.8	0.9	0.8	245
28									0.9	0.9	0.8	139
29									0.9	0.9	0.8	101
30		—							1.1	1.1	0.8	94
31		—		—		—			—	1.1	—	114
Mean										1.2	1.4	448
Ac-Ft										71	84	27560

Maximum Discharge	Calendar year [illegible] c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year Water Year

Division of Water Resources Station located approximately seven miles northwest of Rumsey one and one half miles above mouth. Bear Creek is a north side tributary to Cache Creek. Station was installed on September 16, 1955.

e Estimated

TABLE 99

FLOW OF CACHE CREEK NEAR CAPAY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	97	198	150	78	296	417	444	394	296	60	11	7.4
2	123	217	140	72	264	399	448	430	303	59	11	8.4
3	142	192	140	72	240	404	448	440	296	65	9.6	9.2
4	128	174	132	69	224	476	435	471	289	62	8.4	11
5	116	161	125	67	233	502	430	494	272	58	8.8	13
6	105	150	116	64	261	480	453	489	292	42	7.4	405
7	97	142	112	83	330	466	480	458	292	45	7.1	526
8	93	135	105	103	346	466	489	430	272	24	7.1	217
9	95	128	116	110	292	462	476	408	268	19	5.9	145
10	110	123	155	125	258	480	453	412	261	18	5.9	158
11	112	118	183	135	237	507	435	422	254	17	5.9	123
12	101	116	161	161	250	507	435	417	237	14	5.3	99
13	93	114	145	204	278	507	471	399	230	13	5.9	81
14	91	112	132	233	282	502	480	394	201	12	5.3	70
15	91	110	123	244	258	494	498	422	142	12	5.3	62
16	101	107	114	244	258	494	480	435	91	10	5.9	58
17	155	112	112	233	282	489	430	366	107	8.4	5.9	58
18	220	110	105	217	289	448	462	346	116	8.8	5.6	117
19	292	103	101	204	261	404	471	334	112	8.8	5.3	14800
20	394	99	97	177	261	408	466	326	99	10	5.0	10300
21	334	97	93	371	296	422	489	322	81	11	4.8	3370
22	286	93	91	1130	306	426	484	330	49	10	4.8	20400
23	282	91	87	633	306	448	462	326	41	11	4.8	14900
24	278	87	85	417	322	458	462	330	54	12	4.8	6300
25	268	83	81	338	354	462	453	322	62	12	4.8	3280
26	254	91	78	507	370	458	448	322	60	13	5.3	6010
27	233	164	76	494	342	480	426	314	58	13	5.9	4420
28	214	201	76	394	318	502	399	314	58	13	6.2	4020
29	198		79	358	338	466	390	303	60	13	6.2	3350
30	189	—	78	334	394	453	362	289	59	11	6.5	3060
31	195	—	79	—	426	—	358	306	—	11	—	2910
Mean	177	130	112	262	296	463	449	380	167	22.5	6.4	3203
Ac-Ft	10880	7200	6880	15610	18190	27540	27600	23340	9940	1380	380	196900

Maximum Discharge	Calendar year 31,800 c.f.s. December 22, 1955 of record 35,000 c.f.s. January 21, 1943	Total Runoff in Acre-Feet	Calendar Yaar 345840 Water Yaar 173160

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located three miles northwest of Capay and two miles upstream from Clear Lake Water Company diversion dam. Cache Creek is a west-side tributary to Yolo By-Pass opposite Mile 7.0 north of Sacramento By-Pass. Drainage area is 1052 square miles. Period of record 1944 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 100

FLOW OF CACHE CREEK AT YOLO - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2	136	104									0
2	30	143	74									0
3	65	146	62									0
4	80	130	67									0
5	80	116	76									0
6	65	104	67									0
7	46	96	58									83
8	35	91	49									17
9	34	86	53									0
10	37	81	58									0
11	40	76	86									0
12	5.4	74	91	N	N	N	N	N	N	N	N	0
13	0	69	88	0	0	0	0	0	0	0	0	0
14	0	67	84									0
15	0	64	81									0
16	0	64	76									0
17	0	67	67	F	F	F	F	F	F	F	F	0
18	80	74	58	L	L	L	L	L	L	L	L	0
19	178	71	47	0	0	0	0	0	0	0	0	5660
20	242	67	44	W	W	W	W	W	W	W	W	13300
21	260	44	42									3790
22	215	46	35									14200
23	202	44	19									16900
24	202	40	35									8770
25	191	35	34									3720
26	181	29	31									4940
27	172	56	19									5470
28	155	127	2.5									4320
29	143		0									3670
30	136	—	0									3260
31	130	—	0	—		—			—		—	3090
Mean	97.0	80.1	51.9	0	0	0	0	0	0	0	0	2942
Ac-Ft	5960	4450	3190	0	0	0	0	0	0	0	0	130900

Maximum Discharge	Calendar year 22,500 c.f.s. December 22, 1955 of record 38,700 c.f.s. February 28, 1940	Total Runoff in Acre-Feet	Calendar Year 194500 Water Year 25561

U. S. Geological Survey and Division of Water Resources cooperative station located 0.5 mile south of Yolo. Cache Creek is a west-side tributary to Yolo By-Pass opposite Mile 7.0 north of Sacramento By-Pass. Drainage area is 1150 square miles. Period of record 1903 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 101

FLOW OF YOLO BY-PASS NEAR WOODLAND - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	100	180	60	1	67	40	9.6	12	41	22	8.6	9.6
2	100	160	60	2	64	40	13	13	37	21	8.6	10
3	100	150	60	3	29	41	22	13	34	19	8.1	10
4	110	140	60	4	17	40	29	11	40	19	8.1	10
5	110	130	60	5	19	39	28	10	58	17	7.2	15
6	110	120	60	6.1	24	39	23	14	77	15	7.6	15
7	110	110	60	6	24	38	14	11	74	15	7.2	20
8	120	100	60	6	37	37	9.0	7.6	65	14	7.2	20
9	120	100	60	6	44	37	7.2	6.3	64	14	7.2	20
10	120	94	57	6	52	38	6.8	5.4	68	14	6.8	21
11	120	90	55	7	53	26	5.4	5.8	81	12	7.2	23
12	120	80	55	7	65	18	5.8	10	89	13	6.3	30
13	123	70	55	7	101	10	7.2	16	95	12	4.5	33
14	130	63	55	6.9	95	8.6	9.0	19	132	11	7.6	32
15	150	63	55	2.2	27	15	11	21	149	11	7.2	29
16	200	63	50	3	27	17	13	26	121	10	8.1	27
17	250	63	50	4	20	20	11	27	106	10	8.6	28
18	280	63	50	6	25	20	14	26	100	9.0	8.1	27
19	300	63	50	8	30	15	16	25	101	9.0	7.6	189
20	325	63	50	9	27	15	13	25	97	9.0	7.2	10000
21	320	62	47	10	29	10	10	27	101	8.1	7.6	53200
22	310	62	45	16	43	10	11	27	100	8.1	7.2	105000
23	300	62	45	67	46	6.8	8.6	31	93	8.1	8.1	230000
24	290	62	42	70	43	9.0	7.6	21	68	7.6	7.6	163000
25	280	62	40	84	39	10	6.3	19	49	7.2	7.6	119000
26	270	62	30	153	39	17	5.8	23	40	7.6	8.6	153000
27	260	62	20	163	41	17	5.8	25	33	7.6	8.1	161000
28	250	62	10	139	40	12	6.8	25	29	7.6	8.6	162000
29	240		5	121	40	21	7.2	24	26	7.6	8.6	147000
30	220	—	1	68	40	17	9.6	27	23	8.6	8.6	119000
31	200	—	0.4	—	40	—	11	39	—	9.0	—	89800
Mean	195	87.9	45.4	33.2	42.8	22.8	11.5	19.1	73.0	11.7	7.6	48790
Ac-Ft	11890	4880	2790	1980	2630	1360	708	1170	4350	720	455	3000000

Maximum Discharge	Calendar year 53,[illegible] c.f.s. December 23, 1955 of record 272,000 c.f.s. February 8, 1942	Total Runoff in Acre-Feet	Calendar Year 3033023 Water Year 72788

Station is maintained jointly by the Division of Water Resources and the U. S. Geological Survey. This station is also known as Yolo By-Pass at Elkhorn. The flow of this station is referred to the recorder in the Tule Canal below the end of Sacramento By-Pass except during periods of high water when it is referred to the recorder at Elkhorn on Sacramento-Woodland highway crossing. To get total flow through Yolo By-Pass below Sacramento, combine this flow with the flow in Tables 87 and 103. The flow in this table includes the flows of Cache Creek (Table 100), Knights Landing Ridge Cut (Table 61), and Fremont Weir (Table 64). Period of record 1930 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 102

FLOW OF PUTAH CREEK NEAR WINTERS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	145	158	408	78	345	30	4.6		0	0.8	1.4	4.8
2	236	154	321	70	305	24	4.9		1.4	0.8	1.8	5.0
3	175	139	279	68	273	22	4.4		1.6	0.9	1.2	4.7
4	132	126	249	69	241	20	4.3		0.9	1.2	1.0	4.1
5	110	120	221	65	209	18	5.2		0.2	1.2	1.0	5.0
6	100	114	195	61	190	15	4.8		0	1.0	1.0	6.6
7	8[illegible]	108	178	58	174	14	4.3		0	0.8	1.5	112
8	81	103	170	54	165	12	4.0		0	0.7	1.5	107
9	80	98	176	52	96	10	3.8		0	0.6	2.0	56
10	120	96	197	52	90	9.6	3.3		0.1	0.4	3.0	40
11	156	91	201	48	129	9.6	3.1		2.0	0.3	3.0	36
12	125	87	176	43	120	9.6	2.8		2.2	0.2	3.0	32
13	108	85	162	41	110	9.2	2.5	N	1.5	0.2	3.5	28
14	99	80	152	44	97	8.8	2.5	O	1.0	0.1	4.5	22
15	94	78	140	44	89	9.6	3.1		3.0	0.2	5.2	20
16	109	77	129	44	88	8.8	2.9		4.5	0.3	5.0	20
17	156	77	93	45	86	8.2	2.5	F	4.5	0.2	4.0	21
18	713	74	120	49	83	7.6	2.4	L	4.9	0.3	3.0	40
19	806	69	114	49	80	6.9	2.3	O	6.9	0.5	3.0	1400
20	670	65	106	58	76	5.9	2.1	W	20	0.9	3.5	21100
21	428	63	100	1550	68	4.8	1.7		16	1.5	5.0	9610
22	322	62	97	2040	60	3.7	1.2		10	1.4	4.5	35500
23	274	60	92	787	55	4.4	0.8		7.8	1.3	4.3	33700
24	240	59	88	508	50	5.6	0.4		4.8	1.3	3.9	14200
25	214	57	78	395	49	5.1	0.1		2.7	1.3	3.9	4890
26	198	55	[illegible]	841	46	4.3	0		2.3	1.7	3.6	8060
27	180	744	73	840	44	3.9	0		1.9	1.5	3.8	8530
28	16[illegible]	728	71	509	42	3.7	0		1.6	1.3	3.9	2890
29	154		70	460	38	3.7	0		1.5	1.1	4.3	1980
30	140	—	69	398	35	3.8	0		1.3	0.8	4.7	1540
31	154	—	76	—	34	—	0		—	0.8	—	1460
Mean	219	1[illegible]	151	31[illegible]	115	10.1	2.4	0	3.5	0.8	3.2	5110
Ac-Ft	1345	7[illegible]10	9280	18800	7080	599	147	0	207	51	188	314200

Maximum Discharge	Calendar year 55,[illegible] c.f.s. December 21, 1955 of record [illegible], [illegible] c.f.s. February 21, 1940	Total Runoff in Acre-Feet	Calendar Year 371 12 Water Year 92789

U. S. Geological Survey and Division of Water Resources cooperative station located six miles west of Winters. Putah Creek is a west-side tributary to Yolo By-Pass below Sacramento By-Pass. Drainage area is 57 square miles. Period of record 1930 to date. (Records also available from stream gaging station at Putah from 1905 to 1931). Records for 1955 computed by U. S. Geological Survey.

TABLE 103

FLOW OF PUTAH CREEK NEAR DAVIS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	98	165	420	58	310	1.6						0
2	236	159	308	52	267	0.3						0
3	212	153	254	45	236	0						0
4	159	141	220	45	200	0						0
5	130	132	193	44	179	0						0
6	113	127	172	41	159	0						0
7	103	122	156	39	144	0						0
8	94	116	147	35	135	0						0
9	91	111	150	31	119	0						0
10	98	103	156	28	36	0						0
11	162	101	168	28	86	0						0
12	147	96	153	24	86	0	N	N	N	N	N	0
13	127	91	138	20	80	0	0	0	0	0	0	0
14	113	89	124	18	71	0						0
15	108	84	116	19	59	0						0
16	108	84	106	18	56	0						0
17	144	82	80	19	52	0	F	F	F	F	F	0
18	445	76	94	19	50	0	L	L	L	L	L	0
19	818	71	94	23	47	0	0	0	0	0	0	7100
20	734	67	84	24	43	0	W	W	W	W	W	22500
21	502	63	80	789	38	0						10300
22	375	63	76	2420	29	0						30500
23	312	59	74	990	26	0						32500
24	276	59	69	536	22	0						13000
25	244	58	63	384	20	0						6650
26	220	67	52	576	18	0						5960
27	196	480	54	990	14	0						9440
28	182	784	54	594	12	0						3610
29	168		50	450	9.9	0						2140
30	165	—	47	374	7.5	0						1610
31	162	—	49	—	3.0	—			—		—	1420
Mean	227	136	129	291	84.3	0.1	0	0	0	0	0	3395
Ac-Ft	13970	7540	7940	17320	5190	4	0	0	0	0	0	301000

Maximum Discharge	Calendar year 46,600 c.f.s. December 22, 1955 of record 46,600 c.f.s. December 22, 1955	Total Runoff in Acre-Feet	Calendar Year	352964
			Water Year	86284

U. S. Geological Survey, U. S. Bureau of Reclamation and Division of Water Resources cooperative station located about one mile upstream from Highway 40. Putah Creek is a west-side tributary to Yolo By-Pass below Sacramento By-Pass. Drainage area is 636 square miles. Period of record 1948 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 104

FLOW OF COSUMNES RIVER AT MICHIGAN BAR - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3160	464	517	400	702	309	61	8.5	5.1	6.7	9.8	46
2	2120	458	448	395	694	267	56	9.1	4.1	6.1	10	91
3	840	343	410	370	628	246	49	9.1	4.1	6.7	9.8	104
4	529	297	385	343	594	239	48	8.5	3.4	6.1	9.8	78
5	410	285	361	321	587	232	48	8.5	2.8	5.6	11	67
6	348	274	338	309	614	229	47	7.3	3.4	5.6	10	153
7	293	246	325	305	649	223	46	6.7	3.0	6.7	9.8	513
8	256	232	330	305	750	216	42	6.7	2.2	7.3	12	216
9	263	229	356	301	734	204	41	7.3	2.8	7.9	12	162
10	348	223	481	313	694	192	40	7.9	2.8	10	13	213
11	274	219	481	321	663	183	39	7.3	2.2	6.7	13	159
12	226	219	481	309	649	164	36	6.1	2.8	8.5	15	125
13	216	216	464	305	628	154	34	5.6	3.0	9.8	20	110
14	210	216	442	301	587	146	32	5.1	2.8	10	35	99
15	302	223	415	297	535	139	28	3.4	4.6	10	45	91
16	1060	249	385	293	481	136	26	4.6	5.1	10	40	88
17	587	565	356	364	436	125	25	5.1	7.9	9.8	44	101
18	1370	777	343	649	426	116	25	5.1	9.8	9.1	56	156
19	1720	568	325	561	420	104	23	5.1	9.8	9.1	53	1200
20	1040	481	317	420	431	101	25	5.1	9.1	8.5	49	2530
21	614	420	301	572	453	102	22	8.5	9.8	9.8	67	1470
22	493	385	289	1260	470	97	20	6.1	9.8	9.1	156	13200
23	426	348	281	777	458	88	18	4.1	9.1	12	90	31700
24	385	321	278	628	448	81	16	3.4	7.9	14	66	16900
25	361	305	281	621	415	79	16	3.7	4.1	13	57	5800
26	338	305	289	786	375	78	15	3.4	6.1	13	49	7530
27	317	964	301	702	352	74	15	4.1	5.6	13	44	6500
28	297	720	343	649	330	70	14	4.6	6.1	14	42	3360
29	289		431	621	325	66	13	4.1	6.7	10	41	2390
30	293	—	470	656	343	64	13	5.1	7.3	9.8	40	1900
31	321	—	415	—	338	—	11	5.6	—	9.8		1820
Mean	636	377	375	482	523	151	30.5	6.0	5.4	9.3	37.6	3189
Ac-Ft	39090	20930	23090	28670	32150	8970	1870	367	324	571	2240	196100

Maximum Discharge	Calendar year 42,000 c.f.s. December 23, 1955 of record 42,000 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year	354372
			Water Year	178545

U. S. Geological Survey and Division of Water Resources cooperative station located at road bridge at Michigan Bar. Drainage area is 537 square miles. Period of record 1907 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 105

FLOW OF COSUMNES RIVER AT McCONNELL - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2740	428	891	425	722	297	19				0	23
2	4380	625	657	412	694	255	14				0	27
3	1600	473	556	404	656	228	9.6				0	71
4	852	383	482	371	600	209	2.8				0	71
5	573	335	437	332	586	194	0				0	54
6	458	329	398	302	579	188	0				0	53
7	372	290	362	288	624	186	0				0	330
8	309	265	350	278	710	170	0				0	310
9	270	252	359	278	726	155	0				0	174
10	545	242	446	275	710	146	0				0	156
11	556	238	518	293	674	144	0				0	168
12	348	230	532	296	649	139	0				0	122
13	270	228	507	272	632	120	0	N	N	N	0	97
14	240	225	482	270	604	113	0	O	O	O	0	87
15	220	228	455	265	551	105	0				0	76
16	1510	238	416	262	484	105	0	F	F	F	0	70
17	1850	338	380	280	433	96	0	L	L	L	0	72
18	1400	940	359	538	400	82	0	O	O	O	0	86
19	3630	753	341	677	385	80	0	W	W	W	0	231
20	2930	591	323	500	394	72	0				18	2460
21	1300	504	305	510	418	70	0				23	2330
22	864	443	288	1190	445	67	0				57	3790
23	661	401	278	1140	445	66	0				100	34100
24	552	365	270	790	442	71	0				59	35600
25	500	338	268	682	424	47	0				43	13800
26	467	317	280	774	367	38	0				36	6740
27	428	772	290	790	339	44	0				29	14700
28	395	1900	317	690	305	34	0				26	5900
29	368		404	663	290	24	0				23	2520
30	353	—	482	635	292	22	0				20	1670
31	371	—	467	—	305	—	0		—		—	1680
Mean	1010	453	416	496	512	119	1.5	0	0	0	14.5	4115
Ac-Ft	62110	25130	25590	29530	31510	7080	90	0	0	0	861	253000

Maximum Discharge	Total Runoff in Acre-Feet	
Calendar year 54,000 c.f.s. December 23, 1955 of record 54,000 c.f.s. December 23, 1955	Calendar Year Water Year	434901 212640

U. S. Geological Survey, U. S. Bureau of Reclamation, and Division of Water Resources cooperative station located on Highway 99 bridge 10.7 miles above the mouth. When flow in main channel reaches 4600 cfs water starts to by-pass station. Figures here given include all overflow. Drainage area is 730 square miles. Period of record 1942 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 106

FLOW OF DRY CREEK NEAR GALT - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	993	222	273	26	93	0	0	0			0	0
2	1100	259	196	25	92	0	0	0			0	0
3	384	187	172	25	94	0	0	0			0	0
4	214	148	152	25	84	0.2	0	0			0.1	0
5	142	128	138	24	82	0.4	0	0			0	0
6	117	111	120	22	80	0.6	0	0			0	0
7	94	97	106	21	65	0.5	0	0			0	0
8	77	85	100	22	76	0.5	0	0.3			0	0
9	97	76	92	20	76	0.5	0	0.4			0	0
10	452	68	94	18	66	0.5	0	0.5			0	0
11	239	61	83	18	58	0.5	0	0			0	0
12	130	56	73	17	54	0.5	0	0			0	0
13	97	52	64	17	50	0.5	0	0	N	N	0	0
14	86	49	59	17	47	0.5	0	0	O	O	0	0
15	91	44	57	17	45	0.4	0	0			0	0
16	1190	44	50	15	44	0.4	0	0			0.2	0
17	791	100	45	13	36	0.4	0	0	F	F	0.2	0
18	900	205	44	21	33	0.4	0	0	L	L	0	0
19	2150	129	44	114	29	0.4	0	0	O	O	0	22
20	1430	102	40	64	25	0.4	0	0.1	W	W	0	624
21	667	90	37	53	19	0.4	0	0.1			0	270
22	402	76	34	368	7.0	0.4	0	0.1			0	1840
23	324	69	34	216	0	0.4	0	0			0	12800
24	286	66	32	119	0	0.2	0	0			0	13100
25	259	64	30	95	0	0	0.1	0			0	3890
26	241	61	29	100	0	0	0	0.1			0	2800
27	221	374	28	106	0	0	0	0.3			0	4590
28	204	577	28	94	0	0	0	0.2			0	1660
29	194		28	86	0	0	0	0.2			0	865
30	194	—	27	80	0	0	0.1	0			0	637
31	200	—	28	—	0	—	0	0	—		—	784
Mean	451	129	75.4	61.9	40.5	0.3	0	0.1	0	0	0.0	1416
Ac-Ft	27700	7140	4640	3690	2490	18	0	5	0	0	1.0	87040

Maximum Discharge	Total Runoff in Acre-Feet	
Calendar year 17,000 c.f.s. December 24, 1955 of record 17,000 c.f.s. December 24, 1955	Calendar Year Water Year	132724 51955

U. S. Geological Survey, U. S. Bureau of Reclamation, and Division of Water Resources cooperative station. Station is also known as Dry Creek at Dustin Road and is located at Dustin Road Bridge. Drainage area is 325 square miles. Period of record 1926 to 1933; 1944 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 107

FLOW OF MOKELUMNE RIVER AT LANCHA PLANA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	604	550	273	308	167	338	382	427	482	169	341	344
2	581	676	215	312	340	336	382	403	482	210	338	341
3	594	676	369	306	344	334	382	399	167	485	338	341
4	688	676	344	312	344	286	382	407	161	479	338	341
5	542	676	64	206	345	172	382	407	161	488	338	341
6	534	671	59	205	347	324	387	288	480	501	338	344
7	577	676	352	200	310	330	425	289	462	486	338	377
8	570	666	328	193	180	333	380	406	476	223	338	377
9	544	660	327	113	364	335	320	428	503	220	338	377
10	573	671	330	111	359	330	318	285	170	490	336	377
11	571	671	330	299	365	288	401	447	167	467	338	377
12	550	671	63	306	258	170	404	423	479	475	338	362
13	566	671	63	311	345	328	401	247	451	476	330	347
14	551	617	333	304	299	324	386	247	474	475	344	342
15	590	468	332	302	174	323	383	444	477	222	341	353
16	620	495	306	126	344	323	332	432	480	216	341	353
17	698	532	308	122	346	323	321	430	205	476	344	353
18	612	594	283	306	343	282	381	428	220	463	341	55
19	597	550	65	312	341	167	361	444	451	493	341	367
20	578	442	65	309	341	318	404	247	462	468	341	356
21	698	508	279	333	297	320	402	248	461	487	341	356
22	621	513	260	318	170	321	362	427	436	224	341	1600
23	450	514	293	118	342	324	324	425	454	226	341	19100
24	563	507	238	116	341	324	326	275	199	479	341	14900
25	557	660	236	282	383	282	385	403	204	469	341	6200
26	589	403	116	284	342	191	406	404	453	299	338	5200
27	688	466	114	283	343	485	407	249	456	338	341	6000
28	588	585	239	284	295	488	409	242	460	338	341	4900
29	521		239	293	172	480	407	408	463	338	338	4400
30	558	—	270	126	338	456	285	404	465	338	338	3700
31	594	—	309	—	326	—	301	401	—	341	—	3400
Mean	586	588	239	246	310	321	372	368	382	384	339	2490
Ac-Ft	36030	32660	14680	14660	19050	19110	22870	22640	22730	23640	20200	153100

Maximum Discharge	Calendar year 24,800 c.f.s. December 23, 1955 of record 20,700 c.f.s. November 21, 1950	Total Runoff in Acre-Feet	Calendar Year 401370 Water Year 306100

U. S. Geological Survey and Division of Water Resources cooperative station located three miles dow stream from Pardee Dam. Drainage area is 584 square miles. Period of record 1920 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 108

FLOW OF MOKELUMNE RIVER NEAR CLEMENTS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	862	555	317	342	100	423	394	400	442	290	335	362
2	664	694	194	345	328	435	418	416	483	161	338	350
3	643	694	425	218	387	400	421	402	284	368	338	350
4	730	699	382	458	380	367	418	401	154	463	338	350
5	586	694	221	262	376	203	412	408	152	466	338	355
6	594	690	55	218	382	389	461	356	352	466	335	362
7	611	694	164	215	333	429	405	284	475	477	335	378
8	619	681	374	217	178	428	386	329	472	292	338	391
9	602	677	353	109	378	428	354	406	477	212	338	397
10	708	690	344	95	428	433	326	374	305	385	338	385
11	627	686	371	265	441	*396	353	468	158	469	338	385
12	611	681	224	316	433	215	412	422	355	457	340	378
13	602	677	61	316	419	393	405	339	476	453	345	358
14	582	677	164	316	366	426	407	240	456	456	345	352
15	648	432	353	320	200	418	391	341	480	294	348	365
16	989	470	350	150	388	417	361	422	479	212	348	362
17	796	555	330	124	422	414	327	424	274	372	348	368
18	979	611	294	285	405	*383	360	426	211	451	345	368
19	960	566	194	333	*401	189	384	448	398	466	345	421
20	800	500	57	310	422	347	372	344	468	471	345	409
21	774	462	124	275	*370	396	408	243	470	456	348	375
22	681	539	308	358	*192	389	381	320	462	296	352	902
23	539	543	325	84	378	395	361	424	455	214	348	16100
24	582	539	*355	35	411	404	332	419	265	377	350	20600
25	623	708	*264	203	*444	324	365	401	211	442	350	7170
26	606	520	156	273	*410	275	392	401	379	369	350	5300
27	712	547	119	252	413	390	407	328	469	335	348	6090
28	619	725	223	258	388	676	404	238	452	335	350	4960
29	570		259	254	206	637	288	322	453	335	348	4530
30	559	—	296	88	381	634	342	400	475	332	348	3850
31	643	—	344	—	420	—	320	396	—	335	—	3510
Mean	681	614	258	243	361	402	380	372	381	371	344	2608
Ac-Ft	41890	34130	15870	14470	22180	23910	23340	22890	22690	22820	20450	160300

Maximum Discharge	Calendar year 27,300 c.f.s. December 24, 1955 of record 28,800 c.f.s. November 21, 1950	Total Runoff in Acre-Feet	Calendar Year 424940 Water Year 335680

Division of Water Resources station located one mile north of Clements, 700 feet upstream from the highway bridge. Drainage area is 630 square miles. Period of record 1904 to date.

* Estimated

TABLE 109

FLOW OF MOKELUMNE RIVER AT WOODBRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	692	570	518	15	56	16	17	17	17	199	168	316
2	736	580	280	15	40	16	19	17	18	57	175	324
3	603	649	222	15	92	16	20	17	25	25	177	313
4	626	653	314	14	158	16	20	18	20	118	173	312
5	610	653	307	14	109	17	21	18	18	182	173	313
6	536	653	139	14	81	18	21	18	17	190	169	322
7	534	651	95	14	171	19	20	18	17	206	166	322
8	557	651	206	14	113	17	19	17	20	204	156	349
9	554	640	270	13	47	16	18	17	26	66	140	356
10	621	637	268	13	115	16	18	17	98	30	154	348
11	610	649	266	13	149	14	18	18	28	127	170	343
12	573	649	265	13	79	11	17	18	21	196	187	343
13	550	646	123	12	42	11	17	19	20	218	287	330
14	548	644	79	12	40	12	15	18	111	234	331	313
15	554	522	173	12	29	12	14	17	194	220	472	309
16	803	456	244	12	26	12	14	16	192	92	650	318
17	780	502	238	11	24	11	15	17	229	49	390	322
18	750	548	235	11	21	11	16	17	60	155	338	325
19	934	554	216	11	20	12	16	17	27	223	324	349
20	899	489	114	11	20	12	16	18	170	241	320	385
21	727	428	72	165	19	12	15	17	210	253	320	344
22	692	471	28	212	19	12	15	16	196	244	318	462
23	612	480	20	146	17	12	15	16	188	100	319	2180
24	489	482	22	46	16	11	16	17	204	61	316	14300
25	564	531	22	40	17	11	16	17	73	163	314	10000
26	559	577	18	124	17	11	16	18	36	237	313	5940
27	628	430	17	134	17	12	17	18	128	164	310	5250
28	630	582	17	146	17	12	17	17	183	162	309	5380
29	554		16	109	17	14	17	16	188	170	307	4880
30	522	—	16	118	17	15	17	16	199	172	306	4420
31	568	—	15	—	17	—	17	17	—	166	—	3890
Mean	633	571	156	50.0	52.3	13.6	17.1	17.2	97.8	159	275	2053
Ac-Ft	38910	31690	9590	2970	3220	807	1050	1060	5820	9750	16360	126300

Maximum Discharge	Calender year 23,000 c.f.s. December 24, 1955 of record 27,000 c.f.s. November 22, 1950	Total Runoff in Acre-Feet	Calender Year 247527 Water Year 177217

U. S. Geological Survey and Division of Water Resources cooperative station located 0.4 mile below diversion dam of Woodbridge Irrigation District. Drainage area is 644 square miles. Period of record 1924 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 110

FLOW OF BEAR CREEK NEAR LOCKEFORD - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	253	11	18	0.1	0.7	0.2	0.6					0
2	60	9.5	10	0.2	0.5	0.4	0.7					0
3	21	7.6	7.1	0.2	0.4	0.3	0.3					0
4	10	5.6	5.2	0.2	0.2	0.1	0.1					0
5	6.6	4.6	4.1	0.3	0.2	0	0					0
6	5.2	4.1	3.4	0.1	0.1	0	0					0
7	3.6	3.6	3.0	0.1	0.1	0	0					0
8	2.8	2.4	2.6	0.3	0.1	0	0					0
9	27	3.0	2.8	0	0	0	0.3					1.5
10	173	2.4	3.4	0	0	0	0.1					0.3
11	39	2.2	3.6	0	0	0	0					0.1
12	18	2.0	2.2	0.1	0.1	0.1	0	N	N	N	N	0
13	10	1.9	1.7	0	0	0.1	0	0	0	0	0	0
14	8.0	1.9	1.4	0.2	0	0.1	0					0
15	29	1.3	1.1	0.1	0	0.1	0					0
16	356	0.9	0.9	0.1	0	0.4	0	F	F	F	F	0
17	74	6.2	0.8	0.1	0	0.5	0	L	L	L	L	0
18	420	13	0.7	0.1	0	0.4	0	O	O	O	O	0
19	499	4.9	0.6	0.1	0	0.2	0	W	W	W	W	4.1
20	232	3.2	0.5	0	0	0.2	0					21
21	63	2.4	0.5	0.4	0.1	0.4	0					3
22	44	2.0	0.4	3.9	0.1	0.6	0					378
23	33	1.9	0.3	7.6	0.4	0.6	0					1460
24	25	1.6	0.2	6.3	0.5	0.4	0					1030
25	25	1.6	0.2	2.0	0.1	0.1	0					154
26	19	1.6	0.2	1.4	0	0	0					370
27	14	106	0.2	1.1	0	0	0					247
28	11	48	0.2	1.3	0	0.1	0					70
29	10		0.3	1.1	0	0.2	0					38
30	9.5	—	0.2	1.0	0	0.3	0					27
31	9.0	—	0.1	—	0.4	—	0		—		—	122
Mean	81.0	9.2	2.4	1.0	0.1	0.2	0.1	0	0	0	0	127
Ac-Ft	4980	509	151	56	8	12	4	0	0	0	0	7790

Maximum Discharge	Calendar year 1840 c.f.s. December 23, 1955 of record 2260 c.f.s. February 2, 1945	Total Runoff in Acre-Feet	Calendar Year 13510 Water Year 6675

U. S. Geological Survey and Division of Water Resources cooperative station located at County Road bridge 0.8 mile southeast of Lockeford. Drainage area is 44.4 square miles. Period of record 1930 to 1933; 1943 to date. (Prior record available at a site three miles downstream.) Records for 1955 computed by U. S. Geological Survey.

TABLE 111

FLOW OF CALAVERAS RIVER AT JENNY LIND - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1570	237	20	0	60	173	152	176			0	8.2
2	2040	310	16	0	61	176	158	190			0	14
3	736	249	13	0	61	174	162	183			0	38
4	498	195	12	0	61	171	158	195			0	35
5	205	169	11	0	65	171	154	178			0	26
6	162	152	10	0	104	171	164	162			0	40
7	135	137	9.8	0	118	174	165	154			0	114
8	115	130	9.8	0	93	171	163	143			0	178
9	108	122	10	0	93	176	180	88			0	117
10	393	117	10	0	93	192	178	52			0	162
11	238	113	9.8	0	93	174	164	65			0	113
12	188	108	9.6	0	93	145	143	20	N	N	0	74
13	145	102	7.1	0	93	145	156	7.6	0	0	0	56
14	126	98	6.6	0	94	152	174	1.8			0	44
15	141	94	5.8	5.0	94	174	174	0			0	37
16	1380	81	5.3	71	91	183	174	0			0	34
17	954	32	5.3	102	64	183	174	0	F	F	0	34
18	1650	26	5.3	104	60	183	171	0	L	L	0	49
19	2640	12	5.4	115	88	183	174	0	0	0	0	314
20	1840	9.2	5.4	141	111	183	178	0	W	W	0	2040
21	729	8.0	3.5	113	109	180	185	0			0	1210
22	435	6.6	4.0	74	122	174	183	0			0	2890
23	340	6.2	4.0	28	141	162	180	0			0	10500
24	297	5.3	4.0	23	160	160	185	0			0	10300
25	275	5.3	2.1	31	162	160	200	0			0	8940
26	254	4.8	0	62	162	158	254	0			0	7670
27	237	71	0	60	162	158	208	0			0.5	6850
28	215	36	0	59	158	156	195	0			0.6	5520
29	198		0	59	156	154	188	0			0.6	3810
30	188	—	0	60	178	154	183	0			6.2	2890
31	200	—	0	—	178	—	176	0	—		—	2040
Mean	612	94.2	6.5	36.9	109	169	177	52.1	0	0	0.7	2143
Ac-Ft	37650	5230	400	2200	6720	10070	10900	3200	0	0	39	131800

Maximum Discharge	Calendar year 14,200 c.f.s. December 23, 1955 of record 50,000 c.f.s. January 31, 1911	Total Runoff in Acre-Feet	Calendar Year 208209 Water Year 91778

U. S. Geological Survey and Division of Water Resources cooperative station located 0.2 mile south of Jenny Lind at Milton Road bridge. Drainage area is 395 square miles. Period of record 1907 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 112

FLOW OF CALAVERAS RIVER AT BELLOTA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.5	*0.5		0	40	93	110	105				0
2	0.4	*1.0		0	34	86	108	105				0
3	0.3	0.7		0	36	91	108	100				0
4	0.2	0.3		0	37	94	107	101				0
5	0.2	0.3		0	36	94	103	99				0
6	0.2	0.3		0	51	94	105	96				0
7	0.2	0.3		0	68	86	113	90				28
8	0.2	0.3		0	65	86	114	*90				70
9	0.3	0.3		0	58	97	116	*65				70
10	0.5	0.1		0	53	101	116	*45				70
11	0.3	0		0	52	100	112	*45				68
12	0.2	0		0	53	95	100	28				63
13	0.2	0	N	0	48	94	99	8.6	N	N	N	57
14	0.2	0	0	0	46	92	107	9.1	0	0	0	47
15	0.6	0		0	46	98	110	4.5				38
16	1.9	0		0	46	103	109	0.7				32
17	0.4	0	F	0	45	106	109	0.1	F	F	F	22
18	3.6	0	L	30	40	107	105	0	L	L	L	4.8
19	15	0	0	35	44	108	104	0.1	0	0	0	19
20	34	0	W	92	94	108	105	0	W	W	W	129
21	12	0		95	57	108	108	0				165
22	2.5	0		92	66	108	108	0				193
23	1.2	0		52	82	107	107	0				NR
24	0.7	0		34	84	106	108	0				NR
25	0.6	0		29	83	110	107	0				NR
26	0.6	0		35	84	114	111	0				NR
27	0.4	0		40	84	115	112	0				NR
28	0.4	0		34	88	112	110	0				NR
29	0.4			36	92	112	110	0				NR
30	0.4	—		40	94	110	110	0				NR
31	0.4	—		—	93	—	109	0	—		—	NR
Mean	2.5	0.1	0	23	60	102	108	32	0	0	0	
Ac-Ft	156	8.0	0	1376	3687	6060	6664	1968	0	0	0	

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year 19927

Division of Water Resources station located just above the highway bridge at Bellota. Flows in the Calaveras River and in Mormon Slough are regulated by headgates near Bellota. Period of record 1948 to date. Station washed out due to high water on December 23, 1955.

* Estimated

TABLE 113

FLOW OF CALAVERAS RIVER NEAR STOCKTON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0			0	[illegible]	15	13	7.2				0
2	0			0	[illegible]	21	14	4.2				0
3	0			[illegible]	4.0	16	11	*14				0
4	[illegible]			0	0	17	16	*8.1				0
5	0			0	0	19	15	0.4				0
6	0			0	0	2	6.3	2.5				0
7	0			0	7.7	12	[illegible]	3.4				0
8	0			0	32	0.3	0.4	7.8				0
9	0			0	32	[illegible]	12	[illegible]				0
10	0			0	[illegible]	[illegible]	[illegible]	[illegible]				0
11	[illegible]			0	21	10	20	0				34
12	[illegible]			0	[illegible]	13	12	0				36
13	0	N	N	0	21	14	[illegible]	0	N	N	[illegible]	38
14	0	0	[illegible]	0	15	2.3	1.2	0	0	0	0	34
15				0	15	0	1.6	[illegible]				[illegible]
16	0			0	16	0	[illegible]	0				23
17	0	F	F	0	11	2.0	14	0	F	F	F	[illegible]
18	0	L	L	0	5.7	11	13	0	L	L	L	14
19	[illegible]	0	0	0	0	13	0.7	0	0	0	[illegible]	3.8
20	65	W	W	0	0	19	0	0	W	W	W	0
21	33			0	1.4	11	7.2	0				155
22	11			*14	[illegible]	4.1	10	0				178
23	3.9			30	11	[illegible]	15	0				206
24	1.2			13	18	1.7	21	0				*438
25	0			[illegible]	24	0	19	0				*[illegible]
26	0			0.4	22	10	14	0				343
27	0			0	22	19	15	0				282
28	0			0	15	12	13	0				[illegible]
29	0			1.3	18	12	10	0				150
30	0	—		0	23	14	2.7	0				129
31	0	—		—	[illegible]	—	10	0	—		—	122
Mean	3.9	0	0	2.1	13.6	10.7	11.0	[illegible]	0	0	0	94.3
Ac-Ft	239	0	0	125	[illegible]	637	674	123	0	[illegible]	0	5783

Maximum Discharge	Calendar year *520 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year	[illegible]
			Water Year	2634

Division of Water Resources station located upstream from Solari Road bridge and 3.5 miles above the mouth of Stockton Diverting Canal. Flows in the Calaveras River are regulated by headgates near Bellota. Period of record 1948 to date.
* Estimated

TABLE 114

FLOW OF MORMON SLOUGH AT BELLOTA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1690	263	46	0	1.2	70	[illegible]	33				0
2	2240	338	31	0	[illegible]	74	45	34				0
3	998	314	24	0	14	65	49	29				0
4	419	251	22	0	6.0	64	44	34				0
5	251	210	20	0	5.0	72	36	34				0
6	180	187	17	0	11	64	33	27				0
7	148	168	14	0	50	66	53	17				112
8	122	154	12	0	35	[illegible]	54	17				141
9	197	144	12	0	33	62	60	1.1				[illegible]
10	561	135	13	0	[illegible]	70	64	0				71
11	398	128	11	0	52	68	58	0				[illegible]
12	246	122	10	0	*52	54	33	0				[illegible]
13	176	116	*.2	0	55	52	35	0	N	N	N	3.
14	148	106	8.2	0	60	50	57	0	0	0	0	0
15	275	103	[illegible]	0	64	60	54	0				0
16	1900	103	5.3	0	65	68	50	0				0
17	1290	62	[illegible]	5.8	46	69	51	0	F	F	F	0
18	2020	53	3.4	27	[illegible]	73	30	0	L	L	L	33
19	3560	33	*3.4	14	*11	74	35	0	0	0	0	71
20	2480	24	*3.0	16	*18	73	34	0	W	W	W	1380
21	[illegible]	20	*2.2	30	*24	74	36	0				1250
22	[illegible]	17	*1.7	23	*30	72	41	0				*2220
23	[illegible]	16	*1.3	*20	*37	65	[illegible]	0				NR
24	[illegible]	13	*1.3	*16	*44	61	[illegible]	0				NR
25	357	12	0.9	*13	*50	61	42	0				NR
26	323	11	1.3	*9.5	*62	59	72	0				NR
27	304	119	1.7	*6.1	74	59	65	0				NR
28	[illegible]	87	1.7	*2.7	[illegible]	52	52	0				NR
29	291		0.9	4.2	[illegible]	51	[illegible]	0				NR
30	234	—	0	1.0	69	[illegible]	42	0				NR
31	234	—	0	—	[illegible]	—	43	0	—		—	NR
Mean	769	118	9.3	[illegible]	39.5	3.7	47.2	7.3	0	0	0	
Ac-Pt	[illegible]	[illegible]	571	373	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year	76843

Division of Water Resources station located just below the Bellota-Escalon Road bridge. Flows in Mormon Slough and Calaveras River are regulated by headgates near Bellota. Period of record 1948 to date. Station washed out by high water on December 21, 1955. * Estimated

TABLE 115

FLOW OF STOCKTON DIVERTING CANAL AT STOCKTON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1300	158	36	0	0	10	0					0
2	2500	213	20	0	0	8.6	0					0
3	1220	231	15	0	0	18	0					0
4	463	174	11	0	0	7.6	0					0
5	238	137	7.9	0	0	12	0					0
6	160	118	5.6	0	0	22	0					0
7	120	108	4.3	0	0	6.0	0					0
8	100	94	3.0	0	5.3	9.0	0					132
9	84	88	2.6	0	0.6	6.6	0					77
10	657	84	2.5	0	0	0.7	3.7					40
11	477	80	2.5	0	0	13	7.6					74
12	276	78	1.1	0	0	9.5	0.1					32
13	194	74	0.1	0	0	0.1	0	N	N	N	N	7.3
14	146	71	0	0	0.7	0	0	0	0	0	0	0.3
15	115	68	0	0	9.6	0	0					0
16	1970	68	0	0	6.4	0	0					0
17	1570	53	0	0	7.9	0.7	0	F	F	F	F	0
18	1690	30	0	0	0.2	4.3	1.8	L	L	L	L	0
19	3900	20	0	0	0	9.5	0	0	0	0	0	0.4
20	2810	11	0	0	0	16	0	W	W	W	W	788
21	1150	7.0	0	0	0	13	0					1310
22	579	4.8	0	6.7	0	14	0					1430
23	*382	3.6	0	9.9	0	11	0					*7150
24	*301	2.6	0	5.0	0	3.3	0					*9500
25	*258	1.6	0	0.6	4.6	1.4	0					*8940
26	*227	0.9	0	0	18	0.1	1.3					*8070
27	*198	20	0	0	19	2.5	36					*7140
28	176	90	0	0	11	0	18					*5360
29	157		0	0	0.3	0	6.6					*3640
30	144	—	0	0	2.8	0	2.5					*2420
31	139	—	0	—0	16	—0	0.6		—		—	*1890
Mean	765	74.6	3.6	0.7	3.3	6.6	2.5	0	0	0	0	1871
Ac-Ft	47010	4142	221	44	203	395	155	0	0	0	0	115000

Maximum Discharge	Calendar year 9970 c.f.s. December 24, 1955 of record 9970 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year 167170 Water Year 68300

Division of Water Resources station located approximately 300 feet downstream from Waterloo Road Bridge. Period of record 1944 to date.
* Estimated

TABLE 116

FLOW OF DUCK CREEK AT FARMINGTON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	59	1.6		0								0
2	45	2.3		0								0.1
3	20	1.8		0								0.1
4	6.1	1.2		0								0.1
5	3.2	1.0		0								0
6	2.1	0.8		0								0.5
7	1.9	0.5		0.1								0.2
8	1.8	0.2		0.1								0.3
9	6.7	0.1		0								5.4
10	64	0		0								1.8
11	20	0		0								.4
12	11	0		0								0.2
13	5.2	0	N	0	N	N	N	N	N	N	N	0.1
14	3.2	0	0	0	0	0	0	0	0	0	0	0
15	5.7	0		0								0
16	68	0		0								0
17	34	0	F	0	F	F	F	F	F	F	F	0
18	51	0	L	0.1	L	L	L	L	L	L	L	0
19	59	0	0	.3	0	0	0	0	0	0	0	0
20	48	0	W	0.1	W	W	W	W	W	W	W	0
21	22	0		2.7								0.1
22	0.1	0		31								61
23	4.7	0		2.5								99
24	3.3	0		.4								80
25	2.4	0		0.2								43
26	1.3	0		0.1								41
27	1.5	0		0								50
28	1.2	0		0								27
29	1.1	0		0								9.6
30	1.0	—		0								4.2
31	1.0	—		—		—			—		—	42
Mean	1 .5	0.3	0	1.3	0	0	0	0	0	0	0	15.0
Ac-Ft	113.7	19	0	0	0	0		0	0	0	0	924

Maximum Discharge	Calendar year 100 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 2155 Water Year 1538

Division of Water Resources station located 0.5 mile northwest of Farmington, 300 feet west of Bellota-Escalon Road. Duck Creek is an east-side tributary to the San Joaq in River at Mile 45.1R, via French Camp Slough. Period of record 1950 to date.

TABLE 117

FLOW OF DUCK CREEK NEAR STOCKTON (POCK LANE) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	56	0.4	0	0	0.1	0.4	0.2	0.2	1.3	0.3	0	0
2	77	0.2	0	0.1	0	0.2	0.6	0.2	1.8	0.3	0	0
3	38	0.1	0	0.1	0	0.3	0.1	0.2	1.1	0.1	0	0
4	22	0.1	0	0.1	0	0.1	0.1	0.5	0.5	0	0	0
5	14	0.2	0	0	0	0.2	0.1	0.9	0.3	0.6	0	0
6	9.5	0.4	0	0	0	0.3	0	0.7	0.3	1.0	0	0
7	6.6	0.3	0	0	0	0.4	0.2	0.8	3.3	0.2	0	0
8	4.1	0.2	0	0	0	0.4	0.4	0.7	5.2	0.2	0	0
9	2.7	0.1	0	0.1	0.2	0.2	0.3	1.0	1.2	0.2	0	1.9
10	3.1	0	0	0.2	0.3	0.1	0.6	1.4	0.4	0	0	3.8
11	60	0	0	0.1	0	0	0.2	0.8	1.0	0	0	2.7
12	30	0	0	0.1	0	0	0.1	0.8	1.6	0	0	2.4
13	18	0	0	0.1	0	0	0.8	0.4	1.6	0	0	3.7
14	13	0	0	0.1	0	0.3	0.7	0.1	1.9	0.6	0	2.2
15	9.9	0	0	0.2	0	0.9	0.3	0	1.6	0.2	0	1.0
16	50	0	0	*0.2	0	0.9	0.2	0	1.4	0.1	0.2	0.5
17	134	0	0	*0.2	0	0.3	0.2	0.1	0.7	0.2	0.2	0.3
18	75	0	0	*0.2	0	0.1	0.2	1.1	0.9	0.3	0.1	0.2
19	175	0	0	*0.1	0	0.1	0.1	3.4	0.3	0.1	0	0.2
20	147	0	0	*0.1	0	0.2	0.9	1.4	1.5	0	0	2.0
21	74	0	0	*0	0	0.2	2.4	0.4	3.2	0	0	1.2
22	36	0	0	*2.4	0	0.2	1.6	1.8	1.8	0	0	5.7
23	20	0	0	0.8	1.9	0	0.6	2.8	1.2	0	0	178
24	14	0	0	5.2	2.0	0.6	0.8	2.6	0.5	0	0	357
25	9.3	0	0	4.1	1.4	0.4	0.6	3.3	0.6	0	0	215
26	6.1	0	0	2.1	0.6	0.2	0.4	3.7	0.7	0	0	87
27	4.5	0	0.1	1.0	0.2	0.1	0.2	1.6	0.3	0	0.1	80
28	2.6	0	0.2	0.2	0.1	0.1	0.1	0.8	0.7	0	0.1	64
29	2.0		0.3	0.1	0.1	0.3	0.1	0.4	1.2	0	0.1	37
30	1.4	—	0.1	0.2	0.8	0.1	0.0	0.4	0.5	0	0	29
31	0.8	—	0.1	—	1.2	—	0.6	0.9	—	0	—	24
Mean	36.0	0.1	0	0.6	0.3	0.2	0.4	1.1	1.3	0.1	0	35.6
Ac-Ft	2213	4.0	2.0	36	18	15	27	66	77	9	2	2188

Maximum Discharge	Calendar year 400 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year	4657
			Water Year	2765

Division of Water Resources station located approximately 0.5 mile west of Highway 99 on Pock Lane Bridge. Duck Creek is an east-side tributary to the San Joaquin River at Mile 40.1R via French Camp Slough. During high-flow periods Duck Creek water enters Mormon Slough at a point approximately two miles east of the head of the Stockton Diverting Canal. Period of record 1950 to date.

* Estimated

TABLE 118

DUCK CREEK DIVERSION NEAR FARMINGTON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	424				0							0
2	17				0							0
3	0				0							0
4	0				0							0
5	0				0							0
6	0				0							0
7	0				0							0
8	0				0							0
9	30				0							0
10	129				0							0
11	0				0							0
12	0	N	N	N	0	N	N	N	N	N	N	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0				0							0
15	55				0							0
16	353				0							0
17	3	F	F	F	0	F	F	F	F	F	F	0
18	267	L	L	L	0	L	L	L	L	L	L	0
19	125	O	O	O	0	O	O	O	O	O	O	0
20	32	W	W	W	0	W	W	W	W	W	W	0
21	0				1							0
22	0				8							212
23	0				0							1494
24	0				0							534
25	0				0							18
26	0				0							204
27	0				0							86
28	0				0							0
29	0				0							0
30	0	—			0							0
31	0	—		—	0	—			—		—	26
Mean	47.3	0	0	0	0.3	0	0	0	0	0	0	83.0
Ac-Ft	2840		0	0	18	0	0	0	0	0	0	5105

Maximum Discharge	Calendar year 2040 c.f.s. December 23, 1955 Prior record 2120 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year Water Year	7969

U. S. Corps of Engineers station located approximately one mile northeast of Farmington. The flows recorded by this station are diversions from Duck Creek to Littlejohns Creek, included in Table 115. Drainage area is 2[illegible] square miles. Period of record 1951 to date. Records furnished by U. S. Corps of Engineers.

TABLE 119

FLOW OF LITTLEJOHNS CREEK AT FARMINGTON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	753	51	100	12	6						0	3
2	484	52	62	11	6						0	2
3	626	52	42	10	5						2	2
4	969	46	33	9	5						19	2
5	830	40	26	7	4						34	2
6	142	33	20	4	2						38	2
7	94	29	18	3	2						31	14
8	85	26	17	3	3						22	9
9	94	23	15	1	4						11	34
10	519	21	14	1	4						7	45
11	380	19	14	4	4						7	44
12	334	17	14	3	3	N	N	N	N	N	7	48
13	174	16	13	4	3	0	0	0	0	0	8	44
14	92	16	13	5	2						18	39
15	141	15	12	5	2						16	32
16	853	14	12	6	2						8	22
17	792	53	11	6	1	F	F	F	F	F	10	17
18	728	126	10	6	1	L	L	L	L	L	14	14
19	607	80	10	6	0	0	0	0	0	0	13	12
20	806	49	10	7	0	W	W	W	W	W	10	10
21	1025	38	13	12	0						8	8
22	1000	30	19	52	0						6	481
23	995	26	22	20	0						5	2050
24	958	21	22	13	1						4	1102
25	822	17	22	10	2						3	1805
26	164	16	19	8	2						3	1984
27	102	16	20	6	3						2	1824
28	81	118	19	6	2						2	1347
29	67		20	6	4						1	1819
30	58	—	18	6	3						1	1735
31	56	—	13	—	2	—			—		—	1648
Mean	478	37.9	21.7	8.4	2.5	0	0	0	0	0	10.3	523
Ac-Ft	29420	2102	1335	500	155	0	0	0	0	0	615	32130

Maximum Discharge	Calendar year 2740 c.f.s. December 23, 1955 of record 2740 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 66257 Water Year 37178

U. S. Corps of Engineers station located approximately 300 feet downstream from Farmington-Escalon road. Station was moved to this location in June 1952, from its former location approximately one mile upstream. The flows recorded by this station since June 1952, include flows entering Littlejohns Creek via the Duck Creek diversion canal (Table 118). Period of record 1945 to date. Records for 1955 computed by U. S. Corps of Engineers.

TABLE 120

FLOW OF LONE TREE CREEK NEAR MANTECA (AUSTIN ROAD) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12	1.7	0.3	9.0	32	12	5.1	2.4	3.5	5.1	2.1	0.2
2	143	1.5	0.1	10	28	13	3.7	1.8	4.1	5.6	3.3	0.7
3	135	1.3	0.1	11	24	6.4	2.4	1.3	1.4	11	6.2	4.4
4	88	1.2	0.1	16	*9.4	9.2	11	1.6	0.9	12	3.0	4.3
5	43	1.0	0	14	*17	7.7	5.2	0.6	1.3	14	3.5	2.5
6	18	0.9	0	9.6	22	4.8	2.6	0.9	1.4	14	5.4	4.6
7	9.0	0.6	0	9.8	25	10	1.1	1.1	0.6	11	1.4	47
8	5.9	0.5	0	12	47	6.2	0.6	1.0	0.6	9.8	0.3	87
9	4.9	0.6	0	9.0	46	11	1.6	0.5	1.4	11	1.4	94
10	46	0.9	0	7.7	17	18	4.8	0.9	0.6	11	1.6	125
11	115	1.0	1.7	8.8	*5.7	11	3.3	1.5	0.3	6.4	3.0	85
12	83	0.9	1.2	11	*3.2	5.1	1.6	2.1	0.3	4.9	3.2	36
13	42	1.4	0.8	11	2.2	5.4	0.8	1.6	0.4	4.3	3.0	16
14	18	1.0	0.5	23	1.5	4.9	0.9	1.8	0.6	3.2	12	*9.6
15	9.2	0.6	0.4	20	4.8	10	1.4	2.1	5.1	4.0	20	*6.9
16	94	0.6	0.4	15	6.1	14	0.6	2.0	3.8	6.1	19	*5.9
17	188	0.7	0.3	21	6.2	14	1.5	2.2	3.0	3.3	12	*5.1
18	184	1.5	0.1	50	11	8.0	1.4	1.7	2.0	2.9	4.9	*4.3
19	220	2.3	2.6	90	*16	12	1.6	1.1	2.1	3.4	3.4	*3.5
20	213	1.1	18	56	*18	11	0.7	1.0	1.3	6.4	3.2	*2.9
21	168	0.8	17	29	*8.3	15	0.7	0.6	2.1	5.6	2.5	2.6
22	108	0.6	18	90	*8.3	18	0.4	1.8	12	6.2	1.0	3.0
23	56	0.5	6.9	152	*12	15	1.0	2.2	13	12	0.4	167
24	28	0.4	11	93	*15	9.8	0.5	2.0	21	11	0.3	286
25	14	0.4	6.4	28	*15	6.2	0.6	2.3	22	9.2	0.1	332
26	8.8	0.4	10	*9.4	*10	4.1	0.8	8.0	14	5.6	0.2	368
27	5.4	0.4	12	*6.9	*8.3	4.0	1.8	2.5	10	4.4	0.5	365
28	3.5	0.4	8.4	*6.6	*16	20	2.9	1.3	8.2	4.1	*0.4	358
29	2.3		9.6	6.4	*8.6	26	2.9	1.1	7.3	3.2	*0.3	304
30	1.7	—	5.6	23	8.0	6.4	1.5	2.3	5.6	2.0	0.2	176
31	1.8	—	6.4	—	11	—	1.8	4.6	—	1.4	—	132
Mean	66.7	0.9	4.5	28.6	14.9	10.6	2.2	1.9	5.0	6.	3.9	98.0
Ac-Ft	4103	50	275	1702	918	633	132	115	297	425	234	6027

Maximum Discharge	Calendar year 380 c.f.s. December 26, 1955	Total Runoff in Acre-Feet	Calendar Year 14911 Water Year 10498

Division of Water Resources station located four miles north and two miles east of Manteca at Austin Road Bridge. Lone Tree Creek is an east-side tributary to the San Joaquin River at Mile 40.1R via French Camp Slough. Period of record 1950 to date.
* Estimated

TABLE 121

FLOW OF TEMPO CREEK NEAR MANTECA (JACK TONE ROAD) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13	2.1	0	*.2	9.3	0	0			4.3	1.0	0
2	56	1.8	0	9.3	3.0	0.7	0	0	7.1	4.7	0.0	1.5
3	73	1.3	0	11	3.3	2.5	0	0		12	7.4	1.2
4	49	0.9	0	13	2.7	0.1	0	0	0	11	4.9	*0
5	27	0.7	0	12	3.1	0	0	0	.4	12	5.5	*0.2
6	13	0.7	0	8.4	6.3	0	0	0	1.1	12	7.9	*5.5
7	7.1	0.5	0	8.3	9.0	0	0	0		9.3	2.1	24
8	5.0	0.4	0	11	*23	0	0	0		8.4	0.2	41
9	4.6	0.4	0	7.1	*20	4.5	0	0	0	9.0	4.9	49
10	25	0.4	0.6	7.1	*1.0	0	0	0	0	9.0	3.4	56
11	53	0.2	0.8	9.5	*0	4.1	0	0.1	0	4.5	6.8	36
12	42	0.1	0.2	9.5	*0	.5	0	6.3	0	2.7	6.3	16
13	*29	0	0	10	*0	0.2	0	3.1	0	2.1	6.0	7.4
14	*20	*0.1	0	14	0	0.3	0	2.7	0.9	0	14	3.4
15	*9.7	*0.2	0	12	0	0	0	2.8	7.1	2.7	19	1.3
16	54	*0.2	0	8.8	0.2	0	0	0	3.9	3.9	16	0.4
17	97	*0.4	0	13	1.3	1.0	0	0	1.3	1.3	14	0.4
18	124	0.3	0	22	0.6	0	0	0	0	1.6	9.7	0.6
19	155	0	2.4	34	1.0	1.6	0	1.4	0	1.9	7.4	0.4
20	163	0	3.5	22	0	0	0	0	-	5.8	7.2	0
21	130	0	5.6	14	0	0	0	0	1.9	3.5	5.8	0
22	62	0	2.5	29	0	0	0	0	16	5.0	2.4	7.1
23	31	0	1.1	78	0	0	0	0	16	7.6	1.3	194
24	19	0	3.5	59	0	0	0	0.6	24	7.6	0.9	278
25	12	0	2.7	20	0	0	0	5.4	22	7.2	0.6	287
26	8.4	0	4.2	8.1	0	0	0	0.1	14	3.9	1.4	289
27	6.1	0	4.5	5.4	0	0	0	0.9	11	4.2	1.2	280
28	4.1	0	2.8	5.6	0.8	0	0.3	0.1	8.6	3.5	0.7	270
29	2.7	0	3.9	5.8	0	0	0	1.9	7.6	2.1	0.6	231
30	2.3	—	5.6	15	0	0	0	3.6	4.3	0.7	0	143
31	2.7	—	6.3	—	0	—	0	0	—	1.3	—	87
Mean	42.1	0.4	1.6	16.4	2.8	0.5	0	0.8	4.9	5.3	5.4	74.5
Ac-Ft	2586	21	98	974	174	31	1.0	50	292	327	326	4583

Maximum Discharge	Calendar year 293 c.f.s. December 26, 1955	Total Runoff in Acre-Feet	Calendar Year	8463
			Water Year	6234

Division of Water Resources station located 5.5 miles northeast of Manteca at Jack Tone Road bridge. Tempo Creek is an east-side tributary to the San Joaquin River at Mile 46.1R via Lone Tree Creek and French Camp Slough. Period of record 1950 to date. * Estimated

TABLE 122

FLOW OF FRENCH CAMP SLOUGH NEAR FRENCH CAMP (SHARPS LANE) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	*225	*49	67	18	27	18	7.4	0.1		0	1.1	0.4
2	*210	*47	53	21	26	16	1.0	0		0	0.4	1.6
3	*195	46	38	18	22	10	0.2	0.2		0	0.8	1.9
4	*185	42	30	20	15	6	0.8	0.1		0.3	3.5	5.0
5	*180	37	26	21	14	24	0.3	0		0.6	2.2	2.5
6	*174	32	22	17	17	10	0	0.1		9.2	2.7	2.2
7	160	29	19	18	20	10	0	1.1		5.3	2.2	25
8	157	28	17	20	29	14	0	1.4		6.3	7.5	76
9	155	23	18	18	29	2.6	0	.6		6.6	3.8	74
10	434	22	17	17	17	3.7	0.4	2.6		4.8	8.0	91
11	462	20	16	13	7	0.3	1.6	1.1		4.5	5.4	73
12	406	20	16	18	5	7.9	3.1	0.3		1.4	5.2	44
13	281	20	15	13	1	3.4	1.4	0	N	1.0	5.0	18
14	198	19	15	15	2	9.1	1.8	0.1	O	0.2	8.0	12
15	195	18	14	15	2	11	0.5	0.6		0.1	15	9.8
16	*735	18	13	16	6	0.6	0.2	0.4		2.7	21	7.2
17	*792	18	14	17	6	0	0.1	*0.6	F	1.8	14	6.2
18	*975	82	14	38	5	0	0.3	*0.4	L	0	6.8	3.9
19	*857	71	12	67	7	0	.6	0	O	0.6	6.3	3.6
20	52	48	18	45	9	0	0.5	0	W	7.0	6.3	2.8
21	1150	36	27	20	7	0	0.5	0		.4	7.0	2.2
22	1000	29	30	56	3	0	0.4	0		.6	4.4	12
23	1000	26	2	52	2.5	0	0.5	0		1.8	3.0	1390
24	952	24	33	36	3	0	0.4	0		4.7	2.2	1320
25	877	21	30	18	2.5	0	0.1	0		5.8	1.6	1560
26	*325	18	30	12	1.2	0	0	0		.6	1.6	1880
27	*64	18	30	14	4	0	0	0.1		1.4	1.1	1900
28	*60	18	31	12	4	0	0	0.2		2.1	0.8	1550
29	*2		30	10	5	*1.0	0.1	7.2		0.2	0.5	1680
30	*2	—	27	25	13	*0.5	0.2	1.6		0.9	0.4	1610
31	*50	—	24	—	17	—	0.4	0	—	1.0	—	1460
Mean	437	31.3	25.0	23.3	10.6	4.4	0.7	0.6	0	3.2	5.0	478
Ac-Ft	26880	1740	1537	1388	651	264	43	37	0	196	297	29400

Maximum Discharge	Calendar year 1970 c.f.s., December 27, 1955	Total Runoff in Acre-Feet	Calendar Year	62405
			Water Year	34088

Division of Water Resources station, sometimes referred to as Littlejohns Creek near French Camp, located 1.5 miles southeast of French Camp at Sharps Lane bridge. French Camp Slough is an east-side tributary to the San Joaquin River at Mile 46.1R. Dam placed in channel downstream from station effecting flows. Temporary recorder installed on June 16, 1955, downstream from dam. Period of record 1950 to date.
* Estimated.

TABLE 123

INFLOW TO MILLERTON LAKE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	Mey	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1473	997	1077	1628	2027	3357	2439	1268	1245	445	657	1382
2	1307	988	1211	1829	2098	2736	2330	1158	1281	276	800	1052
3	1048	953	1140	1728	1852	2552	2265	1108	860	509	779	438
4	763	993	1284	1466	2279	3690	2247	1233	926	671	760	565
5	641	761	950	1369	2486	4225	2024	1153	692	714	242	654
6	1088	764	821	1383	2599	5646	1880	1183	1144	698	228	1235
7	930	784	1142	1376	3380	6327	1952	1080	1455	528	747	1409
8	1001	844	1145	1462	3135	6525	1985	1170	1390	551	700	1228
9	957	940	1431	1613	2762	6737	1999	1368	1343	395	653	1226
10	1092	903	1574	2302	3050	6384	1480	1444	899	596	546	1105
11	1135	961	1345	2070	3368	5792	1714	1178	686	621	605	597
12	1074	901	1267	1940	4048	4470	1958	1285	1262	668	375	992
13	1164	757	1236	2340	4520	3880	1951	1230	1170	707	363	814
14	1020	789	1317	2416	3389	3424	1832	934	1170	714	664	1143
15	1043	900	1801	2128	3251	3361	1700	1210	1144	352	615	1169
16	1213	1202	1804	2073	2077	3139	1711	1230	706	297	708	1266
17	1262	2000	1367	2134	2119	2792	1861	1171	788	762	901	933
18	1477	1836	1437	1891	2700	3038	1735	1243	341	637	509	652
19	1620	1386	1156	1660	3245	2664	1639	1182	1078	639	410	1210
20	1280	1043	1015	1685	4345	3018	1388	1203	781	888	473	1706
21	1374	1017	1173	1008	4876	2914	1677	626	928	754	695	1936
22	936	1164	1227	2523	5500	2894	1613	1173	988	361	929	9451
23	852	1058	1242	2260	5559	2699	1398	1402	871	260	579	61740
24	955	1185	1238	e2259	5232	2716	1415	1235	696	560	290	45674
25	1042	1103	1513	2461	3375	2452	1385	1195	b382	825	305	17185
26	830	905	1555	2493	3243	2406	1383	1375	606	798	340	11741
27	1013	950	1553	2339	3356	2584	1302	937	828	694	409	11368
28	984	1309	1551	2249	4078	2373	1249	767	718	604	638	7024
29	772		1702	2172	4620	2470	1354	1167	750	656	786	5599
30	718	—	1640	1890	5102	2437	1188	1363	664	492	828	4689
31	1007	—	1789	—	4397	—	1174	1171	—	400	—	4983
Mean	1079	1075	1347	1980	3489	3639	1717	1178	926	583	584	6521
Ac-Ft	66369	59695	82816	117606	214506	216510	105576	72460	55156	35845	34778	400990

Maximum Discherge	Calendar year 61,740 c.f.s. daily mean December 23, 1955 of record 61,740 c.f.s. daily mean December 23, 1955	Total Runoff in Acre-Feet	Celendar Year 1462307 Weter Year 1148009

These quantities are the daily mean second-feet inflow to Friant Reservoir as computed by the U. S. Bureau of Reclamation, taking into account change in storage, release, spill, precipitation and evaporation; and are representative of the natural flow passing the dam site if the dam had not been constructed. Drainage area is 1671 square miles.
(e) 23-hour day.
(b) 25-hour day.

TABLE 124

DAILY CONTENT OF MILLERTON LAKE IN ACRE-FEET - 1955

Date	Storage at end of day in thousands of acre-feet											
	Jan.	Feb.	March	April	Mey	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	231.9	292.9	336.2	305.1	331.0	459.9	484.3	350.6	199.8	138.3	139.1	160.5
2	234.4	294.8	338.1	303.3	333.9	461.9	481.5	344.0	196.2	137.5	139.8	162.5
3	236.3	296.5	339.8	301.3	336.5	463.3	478.7	339.5	191.8	137.3	140.4	163.2
4	237.6	298.4	341.8	298.8	339.9	465.8	475.8	334.8	186.8	137.3	141.1	164.2
5	239.2	299.8	343.1	296.2	343.7	470.4	472.5	329.9	181.9	137.2	140.6	165.4
6	241.2	301.2	343.6	293.6	347.7	477.5	468.9	325.1	178.0	137.0	140.2	167.4
7	242.9	302.6	344.1	291.3	353.3	485.7	465.5	320.1	174.6	136.6	140.8	169.8
8	244.7	304.2	344.5	289.8	358.7	494.0	462.2	315.5	171.2	136.4	141.3	171.9
9	246.4	305.7	345.1	289.0	363.2	501.3	458.8	310.3	168.0	135.8	141.7	173.9
10	248.4	307.2	346.0	289.6	368.3	508.4	454.3	304.6	164.2	135.7	141.7	175.7
11	250.5	308.4	346.0	290.2	373.8	513.1	450.3	299.0	160.5	135.6	141.8	176.4
12	252.5	308.9	345.5	290.4	380.6	514.6	446.7	293.6	158.5	135.5	141.4	177.5
13	254.7	309.4	344.8	291.5	388.0	514.3	442.8	288.3	156.4	135.5	141.1	177.6
14	256.7	310.7	343.9	292.8	392.7	513.3	438.7	282.4	154.5	135.5	141.5	178.2
15	258.6	311.8	343.4	293.7	396.9	512.3	435.1	277.0	152.8	134.8	142.4	179.0
16	260.9	313.2	342.5	294.6	398.6	511.1	431.4	271.8	150.5	134.1	143.7	180.5
17	263.2	318.4	340.6	295.7	400.3	509.8	428.1	266.5	148.6	134.4	145.3	182.2
18	266.0	321.5	338.6	296.4	402.9	509.2	424.5	261.4	146.0	134.4	146.2	183.3
19	269.1	323.5	335.0	297.1	405.9	507.8	420.0	256.3	145.0	134.6	146.5	185.4
20	271.5	324.9	333.0	298.1	410.4	507.0	414.7	251.4	143.4	135.3	147.7	188.5
21	274.1	326.6	330.2	300.3	415.3	505.6	410.0	245.3	142.5	135.9	149.0	191.9
22	275.9	328.1	327.5	303.7	421.3	503.9	405.3	240.3	142.3	135.8	150.7	210.3
23	277.4	329.9	324.9	306.8	427.1	501.6	400.1	235.7	142.0	135.5	151.7	332.6
24	279.2	326.5	322.2	309.7	432.1	499.7	395.0	231.1	141.5	135.9	152.1	421.1
25	281.2	330.3	320.0	313.2	433.6	498.0	389.7	227.1	140.5	136.7	152.6	446.2
26	282.7	331.5	317.7	316.7	434.6	495.9	384.3	223.6	140.0	137.5	153.1	457.5
27	284.6	332.7	315.3	320.1	436.6	494.2	378.7	219.3	139.9	138.0	153.8	468.1
28	286.4	334.7	312.6	323.2	440.0	492.1	373.0	214.6	139.5	138.2	155.0	470.1
29	287.8		311.0	326.0	445.1	490.0	367.5	210.7	139.0	138.6	156.4	469.2
30	289.2	—	309.0	327.3	451.5	487.1	361.9	207.2	138.7	138.7	157.6	467.1
31	291.1	—	307.1	—	456.7	—	356.2	203.4	—	138.6	—	467.1
Monthly Change	+61.9	+43.6	-27.6	+21.2	+128.4	+39.4	-130.9	-152.8	-64.7	-0.1	+19.3	+309.2

Annual gain or loss in storage: Calender Yeer +237,900; Water Yeer -4,200 Acre-Feet
Differences in storage 1954 to 1955: Maximums - 2,700; Minimums -7,800 Acre-Feet

Period of record 1941 to date. Records for 1955 computed by U. S. Bureau of Reclamation.

TABLE 125

FLOW OF SAN JOAQUIN RIVER BELOW FRIANT - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	108	58	59	149	125	144	188	200	172	134	86	68
2	105	56	59	149	105	146	181	208	181	134	84	66
3	101	56	58	151	83	146	183	205	181	136	86	65
4	101	56	58	151	81	144	183	205	181	134	86	65
5	101	56	58	150	81	144	186	205	181	134	86	65
6	103	56	57	149	87	144	193	205	181	134	86	106
7	103	56	59	142	105	146	188	205	178	131	86	195
8	105	56	63	132	102	146	190	205	176	122	86	198
9	106	55	59	132	93	155	190	202	174	123	86	198
10	102	55	60	134	81	163	190	202	174	123	87	200
11	47	54	57	132	88	170	188	202	172	123	86	200
12	45	54	56	132	96	170	190	200	172	120	86	416
13	45	54	56	132	108	168	188	202	170	113	85	808
14	47	54	55	129	127	166	188	202	166	113	84	808
15	47	54	56	125	136	168	188	212	166	113	89	808
16	88	60	57	125	136	168	188	218	166	113	59	500
17	64	76	56	127	138	168	190	208	166	113	60	103
18	78	60	58	127	138	168	188	195	166	113	60	92
19	82	57	57	127	138	168	188	195	159	113	61	93
20	67	56	57	127	138	168	188	193	155	113	61	140
21	65	56	56	110	138	168	188	193	146	113	62	185
22	64	56	56	84	140	168	186	193	134	115	61	173
23	63	56	61	81	142	168	183	190	136	115	62	464
24	59	56	68	83	147	183	181	188	136	110	62	1520
25	54	56	69	87	147	198	176	181	136	102	62	4740
26	54	57	71	104	147	195	170	172	136	99	62	6240
27	53	65	69	104	142	193	181	170	136	94	62	6210
28	53	63	77	113	144	193	188	170	134	94	63	6100
29	51		96	122	144	193	183	170	134	94	63	6050
30	53	—	110	123	142	193	195	172	134	93	63	5670
31	63	—	140	—	144	—	195	172	—	93	—	5070
Mean	73.5	57.3	65.4	124	121	167	187	195	160	115	73.1	1536
Ac-Ft	4520	3180	4020	7400	7460	9940	11470	11980	9520	7090	4350	94440

Maximum Discharge	Calendar year 6130 c.f.s. December 25, 1955 of record 77,200 c.f.s. December 11, 1937	Total Runoff in Acre-Feet	Calendar Year 175370 Water Year 108380

U. S. Geological Survey station located at Mile 200.13L and 1.5 miles downstream from Friant Dam. Drainage area is 1670 square miles. Period of record 1938 to date. (Prior records available at sites 2.5 and 4.5 miles upstream.) Records for 1955 computed by U. S. Geological Survey.

TABLE 126

FLOW OF SAN JOAQUIN RIVER NEAR BIOLA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	120	71	74	65	116	105	126	107	90	86	66	59
2	132	70	81	84	111	102	126	112	87	88	65	65
3	120	70	75	100	107	97	120	110	92	90	65	68
4	109	68	71	107	87	98	124	114	100	84	65	63
5	105	68	70	107	75	98	122	118	100	80	67	60
6	107	68	68	105	71	95	116	118	103	84	70	61
7	105	67	67	104	78	88	120	126	98	86	72	72
8	105	66	63	98	93	82	118	132	90	87	71	103
9	109	66	67	93	100	81	112	124	93	86	71	158
10	118	65	68	90	97	82	118	114	96	84	72	179
11	122	65	65	92	82	90	126	112	100	82	72	185
12	100	65	63	87	72	93	126	114	105	81	72	195
13	80	65	78	88	71	107	122	110	105	82	77	197
14	71	65	93	88	76	105	114	112	105	81	87	19
15	71	63	61	81	88	102	107	124	102	77	92	1070
16	82	70	67	76	111	102	105	122	96	80	81	1110
17	109	75	56	78	104	100	102	120	96	76	72	954
18	124	82	52	90	98	98	112	126	87	73	61	356
19	122	92	54	102	95	100	112	120	107	74	59	134
20	165	96	53	100	92	105	98	11	108	78	54	140
21	132	75	47	100	95	102	98	126	98	80	60	136
22	105	68	45	113	97	92	98	126	90	81	57	140
23	93	68	45	90	97	93	105	118	87	82	54	762
24	87	65	45	76	93	102	100	107	81	82	55	1660
25	81	63	48	72	102	104	98	100	84	81	57	4530
26	76	67	46	68	104	124	98	100	92	80	55	6710
27	72	71	46	75	102	139	86	98	88	74	57	7120
28	76	71	47	82	107	130	86	107	81	72	58	7040
29	68		47	84	109	128	98	108	80	68	54	6820
30	70	—	46	97	111	128	98	102	87	68	58	6660
31	71	—	55	—	107	—	100	98	—	67	—	6040
Mean	100	69.8	60.1	86.7	95.1	103	109	114	[illegible]	78.8	65.8	1710
Ac-Ft	6150	3860	3700	5340	5850	6130	6720	7010	[illegible]	4850	3920	105700

Maximum Discharge	Calendar year 7240 c.f.s. December [illegible], 1955 of record 7240 c.f.s. December [illegible], 1955	Total Runoff in Acre-Feet	Calendar Year [illegible] Water Year [illegible]

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located at Mile 230.4R and 4.4 miles downstream from Skaggs Bridge. Drainage area is 4205 square miles. This station is at approximately the same location as a former Southern California Edison Company station known as San Joaquin River below Skaggs Bridge for which records are available for the period 1920 through 1938. Records for this station available from October 1952 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 127

FLOW OF SAN JOAQUIN RIVER AT WHITEHOUSE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77	39	35	3.0	44	41	43	14	20	18	11	8.0
2	81	37	40	8.0	62	35	46	24	16	19	10	12
3	83	37	40	21	59	30	42	28	14	20	10	14
4	73	37	40	36	51	29	33	22	15	22	10	19
5	67	36	40	45	48	28	37	26	19	21	10	19
6	64	35	40	48	40	33	38	31	20	18	12	20
7	64	34	39	51	32	29	35	32	22	21	14	12
8	73	34	35	46	35	21	41	35	19	22	14	21
9	81	32	31	42	46	19	43	37	15	23	14	42
10	89	32	33	37	55	16	30	36	14	23	14	67
11	92	32	34	36	49	16	35	29	15	22	14	94
12	92	31	29	38	30	25	39	22	22	21	13	109
13	72	29	27	35	20	27	39	25	30	20	16	121
14	60	29	31	34	23	33	40	24	29	20	24	130
15	53	29	40	31	37	34	34	30	25	21	27	416
16	59	32	30	26	31	26	25	35	28	18	31	549
17	58	39	32	23	44	27	22	35	26	19	33	590
18	90	36	23	32	40	27	20	36	26	16	25	469
19	98	42	18	44	35	23	26	40	29	14	18	257
20	102	48	16	57	33	22	31	38	34	14	16	161
21	132	44	18	52	24	23	20	32	36	15	16	120
22	103	38	15	53	26	22	17	38	32	18	16	102
23	81	32	12	59	32	16	17	40	23	19	14	141
24	70	31	9.0	47	29	14	22	38	20	22	11	198
25	64	29	8.0	28	28	18	21	28	16	25	9	2350
26	58	33	7.0	28	35	18	17	24	17	23	9.0	4800
27	54	33	7.0	20	35	35	15	24	22	21	7.0	5300
28	51	35	5.0	20	35	44	12	22	24	17	8.0	5290
29	48		4.0	30	31	45	9.0	28	21	15	8.0	5220
30	48	—	3.0	37	31	46	12	30	16	14	6.0	5190
31	48	—	2.0	—	35	—	13	26	—	12	—	5060
Mean	74	35	24	36	37	27	28	30	22	19	15	1757
Ac-Ft	4532	1934	1474	2116	2291	1630	1734	1843	1319	1176	873	73192

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	94114
			Water Year	44691

San Joaquin Canal Company station located at Mile 219.83R, below the head of Grevelly Ford Canal. Period of record 1901 to date. Records for 1955 computed by San Joaquin Canal Company.

TABLE 128

FLOW OF SAN JOAQUIN RIVER NEAR MENDOTA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47	34	22	353	265	391	408	446	398	253	102	63
2	50	27	25	380	158	391	385	448	385	253	102	61
3	53	30	32	377	154	404	383	441	350	225	96	63
4	54	30	35	361	156	439	383	428	350	185	94	79
5	51	26	80	333	178	439	380	428	348	167	94	97
6	45	26	124	331	203	437	378	425	345	146	94	112
7	42	14	129	310	187	432	360	428	345	146	94	124
8	39	0	143	285	158	428	363	413	323	145	107	122
9	43	14	193	278	162	426	363	398	299	146	94	126
10	53	146	139	287	165	415	360	398	301	118	82	119
11	59	578	183	272	191	395	368	400	299	90	85	107
12	64	445	230	240	213	395	385	400	290	87	84	66
13	66	115	238	251	229	395	388	400	269	84	82	21
14	62	25	282	263	263	393	385	400	232	81	69	16
15	55	27	342	263	263	395	390	403	189	88	57	16
16	55	30	342	249	289	406	390	405	187	97	54	17
17	55	64	342	230	322	448	403	405	187	96	51	20
18	55	120	280	230	318	450	413	405	187	87	49	21
19	64	115	205	226	356	450	418	400	197	72	47	12
20	81	67	213	205	399	450	438	398	217	85	47	12
21	86	22	205	169	408	450	443	400	232	99	47	12
22	100	21	205	136	421	439	456	425	255	102	45	12
23	93	20	184	129	417	426	454	438	264	103	51	480
24	81	20	165	124	413	426	448	441	271	97	67	990
25	70	21	163	107	413	424	448	425	271	91	66	850
26	62	22	163	227	413	428	446	405	262	94	64	2930
27	55	17	163	263	415	430	443	403	238	103	63	4340
28	48	19	171	289	415	432	443	403	251	102	64	4860
29	43		186	311	419	424	438	403	260	103	66	5010
30	41	—	202	292	406	413	441	403	257	102	66	5060
31	38	—	287	—	393	—	443	400	—	105	—	5140
Mean	58.4	74.8	183	261	296	422	408	413	275	121	72.8	999
Ac-Ft	3590	4155	11252	15533	18173	25133	25079	25418	16381	7442	4330	61404

Maximum Discharge	Calendar year 5230 c.f.s. December 31, 1955 of record 8840 c.f.s. June 1, 1952	Total Runoff in Acre-Feet	Calendar Year	217890
			Water Year	160447

U. S. Bureau of Reclamation station located 2.5 miles below Mendota Dam at Mile 200.2L. Drainage area is 4310 square miles. Period of record 1939 to date. Records for 1955 computed by U. S. Bureau of Reclamation.

TABLE 129

FLOW OF SAN JOAQUIN RIVER NEAR DOS PALOS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	58	46	0									0
2	59	42	0									0
3	62	41	0									0
4	64	40	0									0
5	66	39	0									0
6	64	37	0									0
7	62	36	0									0
8	59	34	0									0
9	57	28	1.0									0
10	61	26	1.0									0
11	65	125	1.0									0
12	69	649	1.0									0
13	70	654	1.0	N	N	N	N	N	N	N	N	0
14	73	206	1.0	O	O	O	O	O	O	O	O	0
15	70	78	1.0									0
16	72	47	1.0									0
17	65	36	1.0	F	F	F	F	F	F	F	F	0
18	65	46	1.0	L	L	L	L	L	L	L	L	0
19	64	82	1.0	O	O	O	O	O	O	O	O	0
20	69	89	0	W	W	W	W	W	W	W	W	0
21	80	64	0									0
22	88	38	0									0
23	99	33	0									0
24	98	31	0									250
25	87	17	0									470
26	76	0	0									690
27	68	0	0									2190
28	62	0	0									3650
29	55		0									4430
30	50	—	0									4800
31	49	—	0	—		—			—		—	4900
Mean	67.9	91.6	0.4	0	0	0	0	0	0	0	0	690
Ac-Ft	4177	5086	22	0	0	0	0	0	0	0	0	42407

Maximum Discharge	Calendar year 4980 c.f.s. December 31, 1955 of record 8200 c.f.s. June 5, 1952	Total Runoff in Acre-Feet	Calendar Year 51692 Water Year 12516

U. S. Bureau of Reclamation station located 600 feet downstream from the head of Temple Slough at Mile 168.0L. Drainage area is 5630 square miles. Period of record 1940 to date. Records for 1955 computed by U. S. Bureau of Reclamation.

TABLE 130

FLOW OF SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	111	305	179	97	208	221	161	111	130	80	27	44
2	132	296	226	96	255	227	153	112	137	82	33	40
3	182	285	250	97	305	234	147	112	140	74	31	44
4	328	271	226	93	328	242	147	111	128	70	31	43
5	352	259	194	96	328	251	146	103	137	68	24	43
6	321	248	176	106	316	259	150	105	148	58	26	38
7	272	237	166	125	308	279	146	107	153	64	25	40
8	234	227	158	147	339	264	146	118	147	61	28	49
9	198	223	173	158	341	253	143	122	155	57	28	55
10	215	223	170	160	337	229	141	123	164	54	54	52
11	274	218	164	153	316	214	139	127	147	50	3	52
12	312	216	172	147	305	206	139	132	146	53	43	76
13	312	237	174	153	294	220	137	123	144	53	43	73
14	296	463	161	143	270	198	134	125	134	3	5	43
15	321	441	160	148	236	208	133	123	126	41	57	39
16	368	371	157	151	216	215	126	112	137	44	55	41
17	375	337	150	150	220	214	122	115	132	44	6	66
18	578	312	148	155	220	206	122	123	113	44	56	61
19	811	283	155	176	218	204	133	125	111	45	56	45
20	951	248	166	197	212	215	136	115	110	48	66	44
21	1140	237	172	263	216	214	133	114	100	45	65	34
22	1050	229	166	307	209	206	122	113	91	44	64	39
23	754	218	143	310	215	203	123	110	90	33	61	94
24	582	208	147	312	230	197	123	114	85	34	60	92
25	503	197	122	301	230	182	115	116	80	37	6	2510
26	451	186	120	279	220	172	115	120	75	34	58	1490
27	411	188	115	253	220	159	116	133	69	31	57	3960
28	377	184	114	221	230	150	114	130	70	31	52	4250
29	348		103	201	220	154	112	136	75	27	46	4380
30	328	—	102	194	230	164	107	137	7	24	4	4370
31	314	—	100	—	220	—	107	144	—	20	—	4340
Mean	420	262	15	19	2.9	.12	132	1.2	114	47.9	47.6	948
Ac-Ft	26190	14570	972	1071	1594	1240	8110	73	7000	1	2830	5

Maximum Discharge	Calendar year 4820 c.f.s. December 2[illegible], 1955 of record 4470 c.f.s. March 25, 1952	Total Runoff in Acre-Feet	Calendar Year 174340 Water Year 124000

U. S. Geological Survey, U. S. Bureau of Reclamation, and Division of Water Resources cooperative station located at highway bridge on road between Gustine and Stevinson, Mile 129.5 above mouth of San Joaquin River and 5.7 miles above the confluence of the Merced River. Drainage area is 6090 square miles. Period of record 1937 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 131

FLOW OF SAN JOAQUIN RIVER NEAR NEWMAN - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	310	680	397	257	397	362	252	243	274	183	136	180
2	344	656	438	281	462	365	297	245	269	187	140	180
3	476	636	482	286	520	394	286	219	267	180	140	176
4	608	612	451	291	556	400	304	203	255	176	140	180
5	620	600	411	286	544	421	294	183	252	161	138	185
6	584	580	384	284	512	414	279	203	262	159	130	183
7	508	560	362	297	524	424	271	235	267	163	128	183
8	462	540	356	304	572	407	274	250	281	165	136	189
9	431	532	368	304	608	359	250	228	286	167	128	205
10	438	516	368	313	576	335	259	233	318	161	144	201
11	520	504	362	327	520	324	259	245	299	159	140	203
12	640	500	378	299	504	347	250	235	291	161	136	217
13	648	500	400	286	472	371	240	245	269	172	154	231
14	616	640	397	291	445	347	224	247	245	159	174	201
15	624	660	356	299	414	341	208	247	255	163	178	194
16	688	596	332	307	391	332	224	238	274	169	176	194
17	938	552	324	307	378	332	226	226	267	189	180	206
18	1280	536	321	356	353	359	217	231	252	178	183	222
19	1420	500	353	404	353	344	259	238	264	174	180	206
20	1750	476	397	451	329	365	264	228	247	169	183	204
21	1670	448	362	532	332	365	247	226	222	159	189	204
22	1570	445	378	644	341	335	224	238	208	161	185	206
23	1290	434	327	640	350	335	224	212	192	157	185	248
24	1060	424	299	612	368	321	226	222	198	161	187	2910
25	952	414	297	560	365	297	238	224	187	159	189	6270
26	898	400	267	504	353	289	250	231	180	152	195	8840
27	884	404	262	465	353	274	243	245	174	154	185	12100
28	835	400	259	404	350	269	224	259	169	154	187	15600
29	768		245	365	362	262	208	281	167	146	183	16700
30	732	—	243	359	387	250	208	284	176	134	187	16600
31	704	—	245	—	378	—	224	284	—	136	—	16300
Mean	815	527	348	377	431	345	247	236	242	163	164	3223
Ac-Ft	50120	29250	21430	22440	26520	20510	15200	14530	14410	10050	9730	198200

Maximum Discharge	Calendar year 16,800 c.f.s. December 29, 1955 of record 33,000 c.f.s. March 7, 1938	Total Runoff in Acre-Feet	Calendar Year 432390 Water Year 253700

U. S. Geological Survey and Division of Water Resources cooperative station located at Hills Ferry Bridge, Mile 123.7 above mouth of San Joaquin River and just below the mouth of the Merced River. Combine flow with Merced River Slough (Table 147) to give total flow passing this point. Drainage area is 9990 square miles. Period of record 1912 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 132

FLOW OF SAN JOAQUIN RIVER AT GRAYSON (LAIRD SLOUGH) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	415	935	525	470	500	440	265	255	315	300	235	300
2	485	900	530	410	540	410	255	220	315	300	235	300
3	575	855	560	370	565	415	325	240	315	320	240	300
4	610	820	590	370	615	400	390	165	315	290	240	295
5	690	790	575	400	640	425	410	165	320	270	240	290
6	735	770	535	370	590	480	365	150	310	260	245	310
7	710	745	510	355	590	440	315	195	300	260	235	305
8	660	715	490	390	685	415	285	250	280	270	235	310
9	630	715	490	410	745	390	310	230	295	300	230	320
10	615	700	525	460	735	340	300	210	315	300	230	335
11	660	675	545	505	670	300	315	205	385	295	230	330
12	740	660	545	440	605	305	285	210	400	290	230	325
13	880	650	585	380	580	345	270	210	335	290	235	340
14	815	660	590	380	505	350	240	245	320	300	250	350
15	815	785	570	360	510	310	245	250	295	290	270	330
16	840	815	475	365	440	280	210	250	285	380	285	315
17	1045	760	445	400	385	300	260	245	320	350	290	310
18	1270	705	450	480	365	315	260	245	355	340	300	315
19	1490	670	450	535	365	380	250	240	380	315	305	340
20	1765	630	490	550	610	390	235	250	325	300	300	340
21	1790	580	455	590	310	365	230	250	310	295	300	320
22	1755	560	410	520	340	310	220	285	305	285	310	320
23	1655	550	410	980	370	290	230	260	325	275	305	1050
24	1485	550	400	910	350	320	245	200	325	270	310	1100
25	1295	550	350	770	320	300	255	195	365	270	305	2000
26	1190	540	380	700	340	285	265	230	365	270	300	1900
27	1150	535	390	640	350	320	275	260	315	260	300	2250
28	1115	535	390	605	385	290	260	310	275	260	300	9400
29	1065		415	555	400	270	235	350	260	250	300	14650
30	1005	—	455	475	420	270	200	310	255	245	295	15400
31	965	—	460	—	440	—	245	310	—	235	—	15350
Mean	997	691	484	505	492	348	273	283	319	288	270	2261
Ac-Ft	61319	38390	29732	30040	30278	20727	16760	14658	19002	17722	16036	139041

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 433705 Water Year 321487

Station is maintained jointly by City of San Francisco (Hetch Hetchy Water Supply), Division of Water Resources, Modesto Irrigation District, and Turlock Irrigation District. Station is at Laird Slough Bridge, Mile 96.05 above mouth of San Joaquin River and five miles above the confluence of the Tuolumne River. High flows by-passing this station through old channel of San Joaquin River are included in this Table. Period of record 1931 to date. Records for 1955 computed by the City of San Francisco.

TABLE 133

FLOW OF SAN JOAQUIN RIVER AT HETCH HETCHY CROSSING - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1155	1915	1495	420	715	1065	385	345	480	520	595	930
2	1460	1780	1600	480	770	885	380	315	490	550	630	955
3	2510	1735	1540	515	780	745	420	280	500	590	845	945
4	1800	1675	1520	550	800	630	510	270	480	550	910	940
5	1760	1645	1510	585	805	625	535	255	490	525	920	995
6	1740	1605	1470	570	760	700	485	270	450	520	920	950
7	1640	1575	1360	550	740	770	455	305	420	515	860	995
8	1600	1645	1240	550	915	880	410	370	390	520	715	1030
9	1515	2075	1240	590	975	955	415	365	400	530	710	•1140
10	2010	2160	1265	650	985	970	445	290	430	570	620	•1060
11	1735	2110	1315	720	905	930	470	335	505	570	570	•1130
12	1900	2105	1330	660	805	875	420	320	545	570	540	•1020
13	1800	2050	1370	595	725	715	385	320	515	540	535	•1060
14	1715	2010	1155	605	660	595	365	375	515	550	570	•1150
15	1680	2095	1010	590	655	495	330	420	495	570	590	•1050
16	1735	2135	930	570	635	445	330	400	490	640	650	•1000
17	2890	2080	830	610	555	445	360	420	520	660	840	•1050
18	3030	2010	785	715	515	490	400	420	570	615	920	•1120
19	3140	1990	760	820	515	550	365	430	595	625	940	•1300
20	4060	1915	800	830	495	585	325	425	550	725	950	•1200
21	3370	1710	760	905	475	530	315	450	520	750	910	•1110
22	3000	1650	675	1075	500	495	320	475	520	725	850	•1105
23	2785	1710	635	1190	510	450	315	430	550	730	905	•2300
24	2485	1660	615	1165	510	445	340	390	585	680	955	•12800
25	2160	1710	585	1040	490	480	365	340	605	620	940	•23600
26	2085	1575	525	980	620	460	350	360	620	620	885	•20800
27	2010	1605	520	935	540	475	360	400	570	705	900	•19600
28	1980	1580	540	875	590	445	350	420	510	710	925	•26000
29	1940		490	805	610	415	325	500	500	715	855	•28400
30	1880	—	450	705	730	385	305	485	500	720	920	•21100
31	1850	—	420	—	975	—	330	480	—	670	—	•21100
Mean	2143	1840	992	728	686	628	383	376	510	614	796	6417
Ac-Ft	131742	102169	60972	43339	42169	37349	23534	23127	30367	37884	47356	394582

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	974589
			Water Year	678318

Station is maintained jointly by City of San Francisco (Hetch Hetchy Water Supply) and Division of Water Resources. Station is at Mile 82.65 above mouth of San Joaquin River and 2.9 miles above the confluence of the Stanislaus River. Period of record 1930 to date. Records for 1955 computed by the City of San Francisco.

• Estimated

TABLE 134

FLOW OF SAN JOAQUIN RIVER NEAR VERNALIS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1710	2420	2420	400	1150	3170	432	340	555	635	765	1320
2	2440	2220	2690	472	1310	2630	404	350	565	702	800	1400
3	4020	2200	2290	517	1330	1750	472	360	615	718	1040	1420
4	3120	2170	2030	565	1280	1420	605	350	565	660	1180	1420
5	2670	2050	1960	565	1190	1290	645	360	560	615	1210	1560
6	2900	2030	2150	600	1070	1630	555	360	508	635	1230	1490
7	2940	1960	2070	535	982	2190	499	330	472	650	1170	1420
8	2570	1950	1930	512	1240	2700	427	422	400	660	970	1640
9	2160	2460	1980	590	1410	2970	414	427	409	685	928	1780
10	2260	2620	2030	729	1370	3050	522	330	463	724	834	1670
11	2520	2540	2290	830	1170	2930	540	330	575	762	718	1910
12	2770	2510	2200	756	982	2770	458	312	670	773	696	1800
13	2670	2500	2410	670	844	2190	400	304	565	748	729	1900
14	2320	2300	2030	605	762	1760	396	350	555	695	773	1850
15	2230	2430	1980	620	768	1420	340	470	575	756	812	1660
16	2230	2600	1880	560	736	1160	350	427	570	839	874	1610
17	3400	2510	1660	650	625	1010	384	458	620	923	1040	1590
18	4100	2520	1690	886	522	916	458	436	718	856	1210	1520
19	4120	2630	1420	1070	566	916	422	463	773	822	1270	1740
20	5250	2860	1280	1140	517	910	360	474	670	940	1270	1730
21	4550	2760	1140	1240	476	795	340	535	640	994	1210	1910
22	4060	2670	934	1500	550	630	330	590	650	994	1130	2040
23	3750	2810	828	1720	560	620	330	504	670	994	1190	3210
24	3220	2770	795	1740	535	595	350	458	670	882	1260	15500
25	2770	2670	740	1560	1200	650	302	376	746	839	1260	40400
26	6[illegible]	2450	665	1430	2200	615	340	392	812	822	1210	47400
27	5[illegible]0	2470	635	1320	1580	605	360	440	751	874	1300	39500
28	5[illegible]0	2450	635	1280	1730	540	360	508	655	813	1360	42300
29	2410		530	1270	1740	411	340	610	640	822	1270	40000
30	340	—	445	1160	2200	458	330	610	620	822	1270	37000
31	2310	—	414	—	3020	—	330	565	—	774	—	35600
Mean	[illegible]	2451	1401	917	1[illegible]	1[illegible]26	416	431	611	7[illegible]	1[illegible]	[illegible]10
Ac-Ft	[illegible]	13[illegible]	86980	5[illegible]	7[illegible]	80[illegible]	256[illegible]	26[illegible]	36470	4[illegible]15	6371	6[illegible]00

Maximum Discharge	Calendar year [illegible], [illegible] c.f.s. December [illegible], 1[illegible] of record [illegible], [illegible] c.f.s. December [illegible], 1[illegible]	Total Runoff in Acre-Feet	Calendar Year	[illegible]
			Water Year	750[illegible]

This station is maintained jointly by the Division of Water Resources and the U. S. Geological Survey. It is located at Durham Ferry Bridge, three miles below the confluence of the Stanislaus River and is at Mile [illegible] above the mouth of the San Joaquin River. Drainage area is 14,010 sq. miles. Period of record 1922 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 135

FLOW OF LITTLE DRY CREEK NEAR FRIANT - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.8	4.7	10	1.7	3.3		0				0	1.4
2	14	4.2	9.0	1.5	3.5		0				0	1.4
3	3.0	4.1	7.8	1.4	2.7		0				0	0.1
4	0.7	4.0	7.3	1.3	2.1		0				0	0.1
5	0.3	3.8	6.6	1.3	1.9		0				0	0.1
6	0.3	3.7	6.1	1.2	1.8		0				0	0.5
7	0.2	3.5	5.5	1.1	7.4		0				0	0.7
8	0.2	3.4	5.5	1.0	7.8		0				0	0.6
9	0.3	3.4	5.5	0.8	4.5		0				0	0.5
10	33	3.4	5.3	0.7	3.2		0				0	0.4
11	7.1	3.4	4.7	0.6	2.2		0				0	0.4
12	3.0	3.3	4.4	0.6	1.8	N	0	N	N	N	0	0.4
13	2.2	3.2	4.0	0.6	1.0	0	0	0	0	0	0	0.4
14	1.8	3.0	4.0	0.6	0.7		0.1				0	0.4
15	1.8	3.0	3.8	0.5	0.5		0				0	0.3
16	47	4.4	3.5	0.5	0.4	F	0	F	F	F	0	0.3
17	16	20	3.3	0.7	0.3	L	0	L	L	L	0	0.3
18	44	11	3.2	1.3	0.2	O	0	O	O	O	0.2	0.4
19	27	7.3	3.0	2.0	0.1	W	0	W	W	W	0	1.1
20	12	6.1	3.0	1.8	0		0				0	1.5
21	9.0	5.5	2.7	1.8	0		0				0.2	1.1
22	7.6	5.2	2.6	4.2	0		0				0.2	32
23	6.6	4.5	2.7	4.0	0		0				0.1	849
24	6.0	4.5	2.7	2.2	0		0				0	1250
25	5.5	4.5	2.7	1.8	0		0				0.1	601
26	5.3	5.0	2.7	5.0	0		0.1				0	323
27	5.0	14	2.7	5.2	0		0.1				0	310
28	4.8	26	2.4	3.0	0		0.1				0	155
29	4.7		2.0	2.2	0		0.1				0	117
30	4.7	—	1.8	2.3	0		0.1				0	95
31	5.7	—	1.7	—	0	—	0		—		—	161
Mean	8.3	5.2	4.3	1.8	1.4	0	0	0	0	0	0	126
Ac-Ft	511	341	262	105	89	0	1	0	0	0	2	7750

Maximum Discharge	Calendar year 1760 c.f.s. December 24, 1955 of record 1810 c.f.s. January 25, 1952	Total Runoff in Acre-Feet	Calendar Year 9061 Water Year 1309

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located four miles above the mouth. Little Dry Creek enters the San Joaquin River at Mile 264.6L. Drainage area is 58 square miles. Period of record 1937 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 136

FLOW OF FRESNO RIVER NEAR DAULTON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	56	63	103	72	135	105	23	4.7		0	2.7	23
2	161	63	94	74	152	96	22	4.7		0	2.7	55
3	78	57	89	74	133	89	20	3.0		0	2.7	40
4	53	52	83	69	122	88	20	2.0		0	3.3	24
5	45	49	78	69	122	88	20	1.0		0	3.3	19
6	40	50	75	66	122	88	20	0.5		0	3.3	54
7	36	49	70	64	176	89	19	0.5		0	3.1	117
8	33	48	70	57	312	88	18	0.2		0	2.5	68
9	32	48	76	64	238	83	16	0.1		0	2.9	61
10	60	49	112	69	195	76	16	0.1		0	2.9	87
11	60	46	94	70	172	75	15	0.1		0	3.9	54
12	46	48	89	69	156	72	15	0	N	0	3.9	37
13	40	48	83	69	148	64	14	0	O	0	4.9	31
14	37	48	78	70	139	60	12	0		0	9.8	28
15	35	50	74	70	133	57	12	0		0	11	25
16	123	55	68	69	127	55	9.6	0		0	7.8	23
17	107	129	63	72	118	50	9.6	0	F	0	12	21
18	147	144	60	84	116	46	10	0	L	0	16	20
19	188	89	59	86	118	42	9.6	0	O	0	15	62
20	125	81	57	81	123	40	8.0	0	W	0	14	149
21	101	70	56	80	125	37	8.8	0		0	19	171
22	88	64	55	174	125	34	8.0	0		0.8	39	784
23	80	59	53	161	123	33	8.0	0		1.5	30	10400
24	75	57	53	120	123	30	7.4	0		1.6	20	7350
25	70	55	53	107	118	30	7.4	0		2.0	16	3850
26	69	56	56	146	112	28	6.4	0		2.2	14	1940
27	64	94	57	152	107	27	5.8	0		1.8	13	2360
28	60	152	60	125	105	27	7.2	0		1.8	13	1090
29	57		60	119	105	26	4.7	0		2.0	14	734
30	57	—	63	116	105	24	4.7	0		2.5	15	534
31	64	—	72	—	103	—	4.2	0	—	2.7	—	922
Mean	73.0	67.2	71.3	90.6	139	58.2	12.2	0.6	0	0.6	10.6	372
Ac-Ft	4540	3730	4390	5390	8540	3470	753	34	0	37	630	53770

Maximum Discharge	Calendar year 17,500 c.f.s. December 23, 1955 of record 17,500 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 61284 Water Year 33816

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located five miles southeast of Daulton. Drainage area 270 square miles. Fresno River is an east-side tributary to the San Joaquin River at Mile 184.0R. Period of record 1941 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 137

FLOW OF CHOWCHILLA RIVER AT BUCHANAN DAM SITE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	241	43	71	21	92	16	1.4				0	5.6
2	445	47	66	21	146	17	1.1				0	23
3	112	41	70	20	95	15	1.0				0	18
4	63	37	71	19	74	14	0.8				0	11
5	45	33	64	20	63	13	0.7				0	8.7
6	37	32	60	19	56	10	0.5				0	79
7	33	30	56	19	75	8.7	0.4				0	130
8	2	29	54	18	236	7.8	0.4				0	43
9	26	28	55	18	130	7.1	0.2				0	38
10	26	28	70	16	98	6.1	0.2				0	44
11	47	28	57	16	79	5.9	0.1				0	26
12	36	26	52	15	65	5.7	0.1	N	N	N	0	18
13	32	26	48	15	57	5.7	0	0	0	0	0	15
14	29	26	43	15	51	5.9	0				0	12
15	29	26	41	15	48	5.9	0				0	11
16	174	26	38	15	45	6.1	0				0	9.7
17	112	28	37	16	43	5.9	0	F	F	F	0	8.1
18	119	60	34	23	40	5.2	0	L	L	L	0	8.7
19	156	44	33	46	37	4.8	0	0	0	0	0	149
20	95	37	32	38	33	4.1	0	W	W	W	0	375
21	71	33	30	38	30	3.6	0				0	209
22	59	30	29	178	28	3.0	0				0	2450
23	54	29	28	109	26	2.7	0				0	18400
24	51	29	27	64	24	2.4	0				0	8110
25	50	27	26	51	24	2.2	0				0	2450
26	50	29	26	79	23	2.1	0				0.4	2190
27	47	48	26	118	21	2.0	0				1.5	2520
28	44	104	26	79	20	1.8	0				1.7	990
29	41		25	64	18	1.6	0				1.8	659
30	41	—	24	60	16	1.5	0				1.9	491
31	41	—	22	—	15	—	0		—		—	646
Mean	78.3	37.0	43.3	41.7	58.3	6.4	0.2	0	0	0	0.2	1295
Ac-Ft	4170	2060	2660	2480	3590	382	14	0	0	0	14	79640

Maximum Discharge	Calendar year 30,000 c.f.s. December 23,1955 of record 30,000 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 95710 Water Year 17208

U. S. Geological Survey and Division of Water Resources cooperative station located five miles west of Raymond. Drainage area 23 square miles. Chowchilla River is an east-side tributary to the San Joaquin River at Mile 151.0R. Period of record October, 1921, to September, 1923; October 1930 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 138

FLOW OF SALT SLOUGH NEAR LOS BANOS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38	82	69	69	95	120	116	110	128	69	35	34
2	43	81	67	74	101	122	107	108	132	65	32	35
3	45	79	77	79	103	123	113	103	130	66	32	36
4	41	76	66	95	107	130	112	104	130	64	32	36
5	37	75	60	108	100	127	116	110	130	63	34	36
6	37	75	55	111	94	125	117	115	136	60	34	35
7	37	74	52	114	95	124	116	119	133	59	34	36
8	37	74	51	122	99	114	119	117	134	57	34	36
9	40	75	50	117	99	105	118	117	144	55	32	38
10	47	77	50	111	96	115	115	122	130	53	34	40
11	66	79	50	106	95	117	113	122	127	52	36	40
12	55	81	60	107	95	119	113	120	120	51	38	41
13	55	80	62	106	94	120	115	111	115	48	38	40
14	52	79	66	110	86	122	120	107	119	47	38	42
15	52	78	71	109	83	122	116	108	121	46	38	49
16	55	81	76	103	87	122	112	115	114	46	38	49
17	68	88	78	105	90	122	116	113	108	47	38	43
18	77	85	85	110	94	123	118	114	107	44	38	42
19	82	84	96	105	99	121	122	116	97	44	37	42
20	95	82	101	106	106	122	121	117	90	43	36	39
21	99	80	93	107	109	122	115	112	86	42	37	38
22	98	7	2	109	115	117	112	114	86	40	36	40
23	97	76	73	102	116	115	111	115	83	40	36	57
24	9	75	[illegible]	97	117	114	108	119	79	38	36	101
25	99	74	79	85	119	110	107	124	75	34	36	135
26	99	71	77	77	121	107	105	129	71	34	34	153
27	9	71	76	69	122	114	103	130	69	34	34	407
28	93	70	66	76	118	113	99	130	66	34	33	454
29	[illegible]		5	79	116	122	93	125	67	34	33	508
30	6	—	[illegible]	6	116	122	91	132	71	34	33	521
31	3	—	6	—	116	—	106	139	—	34	—	519
Mean	7	77.9	70.1	9	103	119	112	117	107	47.6	35.2	120
Ac-Ft	4	4	431	86	63	70	6870	719	6340	2930	2090	7380

Maximum Discharge	Calendar year 5 .f.s. December 2 , 1955 of record 14 .f.s. June 4, 1952	Total Runoff in Acre-Feet	Calendar Year 64880 Water Year 58840

U. S. Geological Survey and U. S. Bureau of Reclamation cooperative station located at San Luis Ranch approximately seven miles north of Los Banos. Salt Slough is an overflow channel of the San Joaquin River. Period of record 1941 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 139

FLOW OF MARIPOSA CREEK BELOW MARIPOSA DAM - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	84	17	90	6.0	21							0
2	409	17	65	6.0	56							0
3	143	18	53	6.0	54							0
4	48	17	48	6.0	36							0
5	26	15	41	5.0	28							0
6	20	14	34	5.0	22							6.0
7	14	14	29	5.0	23							69
8	14	13	25	5.0	46							30
9	12	12	22	4.0	50							15
10	13	12	20	4.0	36							24
11	14	12	20	3.0	29							14
12	20	12	17	3.0	23							6.0
13	17	11	16	3.0	18							5.0
14	14	11	14	2.0	15	N	N	N	N	N	N	3.0
15	14	11	13	2.0	14	O	O	O	O	O	O	2.0
16	57	11	13	2.0	12							2.0
17	98	13	12	2.0	11	F	F	F	F	F	F	2.0
18	116	16	11	3.0	10	L	L	L	L	L	L	1.0
19	252	16	11	7.0	9.0	O	O	O	O	O	O	26
20	126	15	10	14	8.0	W	W	W	W	W	W	148
21	68	14	10	14	7.0							136
22	51	13	10	13	6.0							337
23	41	12	9.0	31	6.0							1194
24	35	12	9.0	24	5.0							4518
25	31	11	9.0	16	5.0							1640
26	28	11	8.0	14	5.0							996
27	24	12	8.0	30	4.0							1145
28	22	135	8.0	32	4.0							990
29	20		8.0	23	4.0							970
30	18	—	7.0	19	3.0							940
31	17	—	7.0	—	3.0	—			—		—	905
Mean	60	18	21	10	18	0	0	0	0	0	0	456
Ac-Ft	3701	986	1303	613	1136	0	0	0	0	0	0	28015

Maximum Discherge	Calendar year 6D20 c.f.s. December 24, 1955 of record 6020 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Yeer Water Year 35754

U. S. Corps of Engineers stetion located 1.5 miles downstream from Mariposa Dam. Mariposa Creek is an east-side tributary to the San Joaquin River between Dos Pelos and Fremont Ford. Drainage aree is 108 squere miles. Period of record 1952 to dete. Records for 1955 computed by U. S. Corps of Engineers.

TABLE 140

FLOW OF OWENS CREEK BELOW OWENS DAM - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	Merch	April	Mey	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34	7.0	5.0	1.0	6.0							2.0
2	21	7.0	4.0	1.0	6.0							2.0
3	7.0	7.0	3.0	1.0	4.0							1.0
4	4.0	6.0	3.0	2.0	3.0							1.0
5	3.0	6.0	3.0	2.0	3.0							1.0
6	3.0	6.0	2.0	2.0	3.0							3.0
7	3.0	6.0	2.0	1.0	4.0							5.0
8	3.0	6.0	2.0	1.0	8.0							3.0
9	4.0	5.0	2.0	1.0	6.0							3.0
10	6.0	5.0	2.0	1.0	4.0							3.0
11	6.0	5.0	2.0	1.0	3.0							2.0
12	4.0	5.0	2.0	1.0	3.0							2.0
13	3.0	4.0	2.0	1.0	3.0	N	N	N	N	N	N	2.0
14	3.0	4.0	2.0	1.0	2.0	O	O	O	O	O	O	2.0
15	3.0	4.0	2.0	1.0	2.0							2.0
16	52	5.0	2.0	1.0	2.0							2.0
17	18	6.0	2.0	2.0	2.0	F	F	F	F	F	F	2.0
18	47	5.0	2.0	5.0	2.0	L	L	L	L	L	L	2.0
19	40	4.0	2.0	6.0	2.0	O	O	O	O	O	O	2.0
20	14	4.0	2.0	5.0	2.0	W	W	W	W	W	W	2.0
21	10	4.0	2.0	5.0	2.0							3.0
22	8.0	4.0	2.0	5.0	2.0							43
23	7.0	3.0	2.0	4.0	2.0							151
24	6.0	3.0	2.0	4.0	2.0							365
25	6.0	3.0	2.0	3.0	2.0							239
26	6.0	4.0	2.0	4.0	2.0							184
27	5.0	8.0	2.0	5.0	2.0							222
28	5.0	13	2.0	4.0	2.0							167
29	5.0		2.0	4.0	2.0							167
30	5.0	—	2.0	4.0	2.0							165
31	5.0	—	2.0	—	2.0	—			—		—	161
Mean	11	5.0	2.0	3.0	3.0	0	0	0	0	0	0	62
Ac-Ft	686	296	139	157	182	0	0	0	0	0	0	3790

Maximum Diecherge	Calendar year 590 c.f.s. December 24, 1955 of record 590 c.f.s. December 24, 1955	Totel Runoff in Acre-Feet	Calendar Year Water Yeer 5250

U. S. Corps of Engineers station loceted one-fourth mile downstream from Owens Dam. Owens Creek is an east-side tributary to the Sen Joaquin River between Dos Pelos and Fremont Ford. Dreinage area is 25.6 squere miles. Period of record 1950 to date. Records for 1955 computed by U. S. Corps of Engineers.

TABLE 141

FLOW OF BURNS CREEK BELOW BURNS DAM - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	230	23	26	0.5	3.0							0
2	141	28	18	0.5	4.0							0
3	37	23	14	0.5	7.0							0
4	20	21	11	0.5	5.0							0
5	0	18	9.0	0.5	4.0							0
6	0	16	7.0	0.5	4.0							6.0
7	0	15	6.0	0.4	4.0							2.0
8	0	13	5.0	0.3	4.0							1.0
9	16	13	5.0	0.2	3.0							5.0
10	109	11	3.0	0.1	4.0							1.0
11	41	10	3.0	0.1	4.0							0
12	23	9.0	2.0	0.1	4.0							0
13	17	9.0	2.0	0.1	3.0	N	N	N	N	N	N	0
14	14	8.0	2.0	0.1	2.0	O	O	O	O	O	O	0
15	23	7.0	1.0	0.1	1.0							0
16	586	7.0	1.0	0.1	1.0	P	P	P	P	P	P	0
17	169	10	1.0	0.1	0.8	L	L	L	L	L	L	0
18	346	11	1.0	0.1	0.5	O	O	O	O	O	O	0
19	220	11	1.0	0.1	0	W	W	W	W	W	W	0
20	93	8.0	0.9	0.1	0							1.0
21	64	3.0	0.9	0.5	0							1.0
22	48	6.0	0.8	0.6	0							310
23	38	6.0	0.8	0.7	0							1873
24	33	5.0	0.8	1.2	0							2360
25	32	4.0	0.8	1.4	0							2039
26	30	6.0	0.8	1.8	0							1848
27	29	20	0.8	1.6	0							1809
28	28	64	0.8	1.5	0							764
29	26		0.7	1.5	0							153
30	24	—	0.6	3.0	0							105
31	24	—	0.5	—	0	—			—		—	109
Mean	77	14	4.0	0.6	2.0	0	0	0	0	0	0	389
Ac-Ft	4762	764	252	37	116	0	0	0	0	0	0	22705

Maximum Discharge	Calendar year 2590 c.f.s. December 24, 1[illegible] of record 2590 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year Water Year 28636

U. S. Corps of Engineers station located one-half mile downstream from Burns Dam. Burns Creek is an east-side tributary to the San Joaquin River between Dos Palos and Fremont Ford. Drainage area is 73.8 square miles. Period of record 1950 to date. Records for 1955 computed by U. S. Corps of Engineers.

TABLE 142

FLOW OF BEAR CREEK BELOW BEAR DAM - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	42	81	3.0	59							0
2	0	49	36	3.0	117							0
3	0	46	23	3.0	38							0
4	68	44	17	3.0	20							0
5	54	41	15	3.0	15							0
6	47	39	12	2.0	11							74
7	42	38	10	2.0	12							164
8	44	36	10	2.0	39							80
9	44		9.0	2.0	32							75
10	44		9.0	2.0	19							85
11	44		8.0	2.0	15							55
12	44		7.0	2.0	11							50
13	49	N	7.0	2.0	9.0	N	N	N	N	N	N	40
14	44	O	6.0	2.0	8.0	O	O	O	O	O	O	35
15	39		6.0	2.0	7.0							30
16	179	R	6.0	2.0	6.0	P	P	P	P	P	P	30
17	178	E	6.0	2.0	6.0	L	L	L	L	L	L	25
18	237	C	4.0	3.0	5.0	O	O	O	O	O	O	25
19	280	O	4.0	5.0	4.0	W	W	W	W	W	W	27
20	142	R	4.0	6.0	4.0							184
21	102	D	4.0	6.0	3.0							132
22	84		3.0	6.0	3.0							691
23	74		3.0	7.0	3.0							2204
24	66		3.0	7.0	3.0							3309
25	61		3.0	6.0	2.0							1731
26	58		3.0	6.0	2.0							1555
27	55		3.0	14	2.0							1490
28	50		3.	9.0	2.0							1166
29	47		3.	9.0	2.0							332
30	44	—	3.0	9.0	2.0							150
31	43	—	3.0	—	2.0	—			—		—	115
Mean	73		10	4.0	15	0	0	0	0	0	0	447
Ac-Ft	4489		623	242	918	0	0	0			0	27479

Maximum Discharge	Calendar year [illegible]00 c.f.s. December 24, 19[illegible] of record [illegible] c.f.s. December 24, 195[illegible]	Total Runoff in Acre-Feet	Calendar Year Water Year

U. S. Corps of Engineers station located at [illegible] rating box of dam. Bear Creek is an east-side tributary to the San Joaquin River between Dos Palos and Fremont Ford. Period of record 195[illegible]. Records for 195[illegible] computed by U. S. Corps of Engineers.

TABLE 143

FLOW OF MERCED RIVER AT EXCHEQUER - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	54	51	49	1480	472	1 20	1680	1800	1500	43	41	50
2	49	51	49	1510	431	1770	1600	1300	1510	44	32	51
3	43	51	50	1500	434	1740	1590	1790	1510	43	30	51
4	43	51	50	1500	434	1740	1610	1790	1520	44	31	48
5	46	51	50	1560	479	1750	1680	1840	1540	44	34	49
6	49	51	50	1540	538	1750	1670	1840	1570	44	34	55
7	52	52	50	1480	268	1750	1700	1800	1590	49	34	50
8	4[illegible]	52	50	1490	57	1740	1760	1770	1590	53	35	48
9	53	52	50	1560	68	1760	1790	1760	1580	53	37	48
10	54	52	51	1600	136	1830	1730	1750	1620	53	37	49
11	53	52	51	1590	301	1870	1760	1760	1650	53	38	50
12	51	52	51	1560	400	1880	1760	1760	1680	51	39	51
13	51	52	51	1540	651	1900	1810	1730	1670	50	40	52
14	52	52	51	1520	710	1350	1840	1700	901	50	40	52
15	53	52	51	1520	980	1800	1830	1690	65	49	40	53
16	61	53	51	1490	1170	1770	1850	1690	51	46	43	53
17	57	52	51	1350	1350	1740	1850	1650	53	4[illegible]	45	52
18	63	52	51	1080	1460	1730	1080	1630	57	46	46	49
19	58	52	50	898	1500	1760	1880	1570	57	53	46	46
20	57	52	50	870	1520	1770	1070	1560	54	55	48	44
21	54	52	51	604	1570	1770	1850	1560	48	51	48	51
22	53	52	48	338	1650	1750	1810	1560	42	5[illegible]	50	65
23	53	48	588	317	1710	1730	1810	1580	42	51	53	122
24	53	50	720	343	1810	1730	1780	1570	42	50	54	6920
25	52	45	770	374	1840	1730	1770	1560	42	49	50	8980
26	52	44	785	395	1790	1740	1730	1540	42	48	45	8680
27	51	49	992	446	1680	1730	1830	1540	42	48	46	9490
28	51	49	1150	632	1650	1710	1820	1530	42	48	48	9110
29	51		1200	816	1730	1660	1820	1510	43	46	48	8980
30	51	—	1240	720	1810	1680	1790	1470	43	46	48	8320
31	51	—	1350	—	1830	—	1790	1470	—	45	—	6340
Mean	52.2	50.0	319	1120	1049	1765	1775	1664	740	48.5	42.0	2205
Ac-Ft	3210	2[illegible]	19640	66650	64500	105000	109200	102300	44030	2980	2500	135600

Maximum Discharge	Calendar year 10,400 c.f.s. December 27, 1955 of record 46,200 c.f.s. December 4, 1950	Total Runoff in Acre-Feet	Calendar Year 658430 Water Year 528570

U. S. Geological Survey and Merced Irrigation District cooperative station located 0.5 mile downstream from Lake McClure. Drainage area is 1035 square miles. Period of record 1922 to date. (Prior records available at a site one mile upstream.) Records for 1955 computed by U. S. Geological Survey.

TABLE 144

FLOW OF MERCED RIVER BELOW SNELLING - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	112	17	27	26	52	20	8.8	14	12	1.4	1.4	4.6
2	83	18	26	14	39	16	6.2	13	8.8	1.2	1.2	5.0
3	47	22	26	12	33	13	5.8	12	8.4	1.2	1.2	3.8
4	36	23	25	11	34	12	6.6	12	10	1.2	1.2	3.1
5	32	23	24	10	36	10	7.1	14	12	1.2	1.4	3.5
6	33	22	14	12	49	14	5.8	20	13	1.2	1.4	6.2
7	33	23	11	13	43	14	6.6	20	14	1.2	1.4	7.1
8	34	25	7.3	14	37	14	7.7	28	18	1.2	1.8	6.8
9	34	25	8.8	11	21	9.4	13	19	18	1.0	2.0	8.3
10	67	23	8.3	37	14	6.6	18	12	13	0.8	2.3	8.4
11	49	31	10	42	10	8.3	20	12	18	1.0	2.0	10
12	37	28	11	43	9.3	9.4	23	14	25	1.0	2.0	9.4
13	29	30	10	38	5.4	7.7	24	15	38	1.0	3.1	9.4
14	27	31	12	34	4.6	12	23	15	34	0.8	4.2	8.8
15	31	29	14	44	6.6	20	34	17	18	0.6	3.5	9.4
16	200	29	14	56	11	21	36	19	21	0.6	4.2	10
17	91	28	14	59	10	17	36	20	7.7	0.6	5.4	11
18	130	24	14	121	10	15	36	14	5.4	0.8	4.6	10
19	114	26	12	112	14	16	33	14	3.5	0.8	4.6	9.4
20	64	27	12	82	24	20	31	23	2.7	1.2	3.8	8.8
21	54	27	11	71	10	19	30	10	2.3	1.2	4.2	6.6
22	47	28	11	36	7.4	17	36	10	2.3	1.4	2.7	43
23	44	29	10	25	12	18	26	9.4	2.0	1.4	1.6	4430
24	61	29	6.6	2	14	20	22	13	1.8	1.6	1.0	9080
25	*138	27	6.6	31	15	19	19	13	1.8	1.8	1.0	11000
26	*117	27	12	18	16	20	18	15	1.8	2.0	1.6	10100
27	*32	30	18	17	30	24	21	10	1.6	2.3	2.3	9800
28	*18	28	23	17	21	23	27	21	1.4	2.3	2.7	9030
29	*12		36	47	18	26	25	37	1.4	2.3	2.5	8050
30	*11	—	34	44	21	18	23	22	1.4	2.0	2.5	8870
31	14	—	32	—	24	—	15	15	—	1.8	—	7260
Mean	58.1	26.0	16.2	37.5	21.0	16.1	20.8	16.2	10.6	1.3	2.5	2540
Ac-Ft	3632	1446	995	2231	1294	961	1276	996	633	80	148	156100

Maximum Discharge	Calendar year 12,700 c.f.s. December 24, 1955 of records 26,000 c.f.s. December 4, 1950	Total Runoff in Acre-Feet	Calendar Yaar 166792 Water Year 14491

Division of Water Resources station located at Merced-Snelling Highway bridge Mile 42.1 above mouth. Period of record 1930 to date. * Estimated.

TABLE 145

FLOW OF MERCED RIVER AT CRESSEY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	117	111	108	88	112	70	62	75	84	45	49	74
2	462	110	108	88	121	78	57	62	78	48	49	79
3	284	112	99	82	112	72	53	61	73	52	50	80
4	186	124	97	79	103	60	50	61	67	51	52	80
5	148	118	97	70	97	54	50	60	62	56	54	80
6	135	108	92	74	97	55	48	62	60	53	54	84
7	129	103	90	74	107	52	45	70	69	52	53	88
8	126	104	87	73	117	51	42	70	78	52	51	93
9	128	103	90	70	111	50	42	80	86	51	47	93
10	138	100	90	67	102	49	44	80	88	51	46	90
11	211	99	88	*70	94	51	52	73	88	51	50	85
12	183	103	85	*76	85	53	50	66	88	51	55	84
13	150	104	85	*79	78	55	50	65	93	51	52	84
14	131	102	85	*81	74	51	58	64	96	50	55	82
15	126	100	87	*85	75	52	57	67	90	49	57	81
16	386	102	87	87	74	62	57	69	87	50	59	82
17	871	103	87	98	69	62	65	72	88	50	61	84
18	409	100	86	164	66	53	73	75	86	49	63	85
19	928	100	88	196	63	55	73	73	70	49	62	88
20	427	100	85	169	65	56	67	70	64	49	61	96
21	280	100	82	162	68	52	62	72	59	49	63	91
22	216	99	80	151	64	53	63	74	56	50	63	94
23	188	99	76	121	61	47	69	72	54	50	62	3200
24	169	100	76	107	65	47	73	72	53	50	65	7090
25	209	97	75	98	66	50	75	74	54	50	64	10200
26	264	94	74	99	70	51	65	78	54	50	66	10200
27	214	99	75	94	68	55	64	79	53	49	67	11700
28	145	104	76	88	65	55	72	78	48	49	69	10900
29	126		78	86	84	56	81	85	45	49	73	10500
30	118	—	84	96	80	60	82	98	45	49	73	10300
31	114	—	90	—	76	—	80	97	—	49	—	9160
Mean	249	104	86.7	99.1	83.5	55.6	60.7	72.7	70.3	50.1	58.2	2752
Ac-Ft	15310	5748	5330	5895	5135	3306	3731	4471	4185	3082	3461	169200

Maximum Discharge	Calendar year 12,300 c.f.s. December 27, 1955	Total Runoff in Acre-Feet	Calendar Year	228854
			Water Year	66457

Division of Water Resources station located at Cressey Bridge, Mile 27.6 above mouth. Period of record 1941 to date.
* Estimated

TABLE 146

FLOW OF MERCED RIVER NEAR STEVINSON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	156	200	168	124	192	127	82	127	147	96	96	120
2	175	191	174	154	210	135	114	120	142	105	95	123
3	358	190	173	166	214	137	127	100	130	92	95	120
4	296	191	165	177	212	149	143	76	124	107	95	126
5	244	199	165	160	186	144	105	72	130	89	95	129
6	216	191	162	148	177	130	110	103	126	96	93	127
7	198	181	160	149	191	123	108	130	132	102	93	130
8	187	174	160	150	214	115	111	132	149	104	94	130
9	182	173	157	133	216	90	102	106	155	107	93	138
10	184	169	160	149	191	80	110	113	173	102	87	138
11	202	167	160	165	163	100	123	124	165	103	85	142
12	244	165	169	135	160	139	111	113	162	114	83	142
13	225	165	195	130	148	142	103	136	138	122	100	141
14	203	165	195	144	137	136	72	130	127	112	113	139
15	194	162	157	151	143	118	62	133	148	114	110	138
16	220	163	150	149	144	96	93	125	148	133	111	139
17	606	165	151	156	136	103	102	117	131	144	115	141
18	608	165	154	212	114	133	130	120	142	132	113	143
19	666	165	190	227	113	123	125	124	167	124	112	141
20	742	163	200	249	101	135	129	114	136	117	112	145
21	471	163	177	262	96	127	106	110	114	108	115	149
22	376	161	186	310	106	103	94	118	102	113	112	152
23	324	162	159	283	113	113	99	108	102	114	113	206
24	292	162	143	253	105	99	107	110	110	117	115	3630
25	262	163	113	212	123	89	120	112	93	114	118	5940
26	207	162	100	189	111	105	124	115	93	111	114	7670
27	310	163	112	173	112	99	107	129	90	113	115	9280
28	280	166	100	165	96	89	94	159	93	113	117	10900
29	237		91	160	121	95	91	168	96	104	116	10200
30	221	—	92	160	132	71	104	168	91	98	116	9810
31	210	—	98	—	133	—	114	156	—	96	—	9540
Mean	302	172	153	180	149	114	107	122	129	110	105	2264
Ac-Ft	18600	9530	9390	10710	9140	6810	6590	7480	7650	6780	6230	139200

Maximum Discharge	Calendar year 11,200 c.f.s. December 28, 1955 of record 13,600 c.f.s. December 5, 1950	Total Runoff in Acre-Feet	Calendar Year	238110
			Water Year	109150

U. S. Geological Survey, U. S. Bureau of Reclamation, and Division of Water Resources cooperative station, also known as Merced River below Stevinson Drain, located at Mile 4.0R above mouth. Drainage area is 1274 square miles. Period of record 1944 to date (prior records available at a site 3.5 miles downstream). Records for 1955 computed by U. S. Geological Survey.

TABLE 147

FLOW OF MERCED RIVER SLOUGH NEAR NEWMAN - 1955

Dete	Daily Meen Flow in Second-Feet											
	Jan.	Feb.	Merch	April	Mey	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12	N	N	N	N	N	N	N	N	N	N	N	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14												0
15												0
16												0
17	F	F	F	F	F	F	F	F	F	F	F	0
18	L	L	L	L	L	L	L	L	L	L	L	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	W	W	W	W	W	W	W	W	W	W	W	0
21												0
22												0
23												0
24												183
25												904
26												1540
27												2090
28												3570
29												3990
30		—										3840
31		—		—		—			—		—	3540
Meen	0	0	0	0	0	0	0	0	0	0	0	634
Ac-Ft	0	0	0	0	0	0	0	0	0	0	0	39000

Meximum Discherge	Calender year 4240 c.f.s. December 28, 1955 of record 6410 c.f.s. December 5, 1950	Totel Runoff in Acre-Feet	Calender Yeer 39000 Weter Yeer 0

U. S. Geological Survey, U. S. Bureau of Reclamation, and Division of Water Resources cooperative station, also known as Merced River Slough near Hills Ferry Road Bridge, located 500 feet downstream from the head of the slough between Merced River and San Joaquin River. This station records the flow which at high stages in the Merced River by-passes the Hills Ferry Road Bridge and reaches the San Joaquin River at Mile 122.2 at a point below the Newman gaging station. Period of record 1941 to date. Records for 1955 computed by the U. S. Geological Survey.

TABLE 148

FLOW OF ORESTIMBA CREEK NEAR NEWMAN - 1955

Dete	Daily Meen Flow in Second-Feet											
	Jan.	Feb.	Merch	April	Mey	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	4.8									0
2	0	0	2.2									0
3	0	0	1.0									0
4	0	0	0.1									0
5	0	0	0									0
6	0	0	0									0
7	0	0	0									0
8	0	0	0									0
9	0	0	0									0
10	0	0	0									0
11	0	0	0									0
12	0	0	0									0
13	0	0	0	N	N	N	N	N	N	N	N	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0									0
16	0	0	0									0
17	0	0	0	F	F	F	F	F	F	F	F	0
18	0	0	0	L	L	L	L	L	L	L	L	0
19	7.5	0	0	0	0	0	0	0	0	0	0	0
20	0.6	0	0	W	W	W	W	W	W	W	W	0
21	0	0	0									0
22	0	0	0									0
23	0	0	0									3170
24	0	0	0									1310
25	0	0	0									300
26	0	0	0									228
27	0	0	0									205
28	0	6.8	0									104
29	0		0									62
30	0	—	0									47
31	0	—	0	—		—			—		—	192
Meen	0.3	0.2	0.3	0	0	0	0	0	0	0	0	181
Ac-Ft	16	13	16	0	0	0	0	0	0	0	0	11140

Meximum Discherge	Calender year 5620 c.f.s. December 23, 1955 of record 5620 c.f.s. December 23, 1955	Totel Runoff in Acre-Feet	Calender Yeer 11185 Weter Yeer 45

U. S. Geological Survey and Division of Water Resources cooperative station located at highway bridge five miles west of Newman. Orestimba Creek is a west-side tributary to the San Joaquin River at Mile 115. Period of record 1932 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 149

FLOW OF TUOLUMNE RIVER ABOVE LA GRANGE DAM - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	633	1600	1060	2630	599	2270	2290	1850	1940	723	666	981
2	610	1650	1030	2680	909	2270	2300	1890	1930	515	686	885
3	882	1590	1000	2660	896	2280	2280	1900	1990	909	689	663
4	1000	1500	1070	2600	964	2300	2250	1780	1660	805	697	396
5	838	1410	934	2680	851	2280	2270	1590	1680	733	505	1010
6	994	1220	629	2680	975	2250	2330	1550	1980	800	196	1020
7	888	1520	945	2700	982	2260	2330	1240	1970	710	741	918
8	787	1490	962	2700	481	2250	2350	1880	1860	505	918	1130
9	668	1490	973	2700	811	2250	2360	1850	1610	352	909	1060
10	1080	1390	927	2660	805	2220	2320	1820	1400	776	834	732
11	968	1420	854	2450	983	2220	2310	1870	964	668	686	530
12	947	1300	929	2220	1080	2170	2360	2030	1660	619	827	1260
13	1080	1200	818	2090	1120	2150	2380	1930	1520	644	605	1380
14	1070	1470	1230	1980	1020	2120	2390	1600	1460	764	967	1430
15	935	1110	1330	1820	746	2170	2410	1960	1350	341	757	1350
16	481	1300	1350	1620	1350	2160	2250	2000	1410	174	1020	1350
17	1110	1150	1300	1300	1760	2210	2140	2060	1250	362	757	1080
18	1010	1320	1350	1750	1820	2220	2140	2030	1490	315	757	797
19	937	918	2360	1500	1910	2190	2140	2060	1620	293	403	1380
20	848	676	2470	1220	2180	2170	2120	1950	1460	306	221	1130
21	870	1080	2470	810	2400	2230	2130	1660	1430	251	686	1210
22	629	769	2520	457	2370	2230	2030	2130	1430	174	733	1910
23	439	1050	2560	266	2300	2240	1990	2170	1340	113	972	5960
24	1200	984	2560	122	2350	2230	1980	2130	1170	291	226	32800
25	1500	1080	2650	707	2340	2230	2010	2060	888	282	716	19900
26	1300	1100	2580	603	2330	2220	2010	2010	1510	290	507	18400
27	1240	729	2560	644	2320	2200	2020	1940	1530	283	244	21000
28	1380	1140	2580	440	2320	2260	2060	1740	1380	262	757	9400
29	1190		2600	530	2310	2280	2190	2190	1310	153	777	8520
30	896	—	2620	450	2250	2270	2040	2200	1390	66	859	8520
31	1260	—	2660	—	2220	—	2010	2240	—	237	—	8450
Mean	957	1238	1674	1656	1540	2227	2200	1913	1519	442	684	5050
Ac-Ft	58850	68740	102900	98520	94710	132500	135300	117600	90410	27210	40700	310500

Maximum Discharge	Calendar year 41,700 c.f.s. December 24, 1955 of record 61,000 c.f.s. December 8, 1950	Total Runoff in Acre-Feet	Calendar Year 1277940 Water Year 1023150

U. S. Geological Survey, City of San Francisco, Modesto Irrigation District, and Turlock Irrigation District cooperative station located 0.5 mile downstream from Don Pedro Dam and 3.5 miles upstream from La Grange Dam. Drainage area is 1540 square miles. Period of record 1915 to date. (Prior records available at a site 3.5 miles downstream.) Records for 1955 computed by U. S. Geological Survey.

TABLE 150

FLOW OF TUOLUMNE RIVER AT LA GRANGE BRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	384	*632	835	e28	13	13	7.9	7.9	11	5.7	544	467
2	358	*653	799	*26	17	13	7.9	7.2	9.7	3.6	526	467
3	622	*622	787	e26	13	13	7.9	7.2	6.4	13	542	615
4	622	*622	841	*24	13	13	8.6	7.9	6.4	8.6	642	390
5	612	*617	732	*23	13	13	8.6	5.7	5.7	9.7	488	476
6	622	*607	602	e23	13	13	9.7	5.7	7.9	11	242	484
7	622	e1130	617	e22	14	13	9.7	5.7	9.7	7.9	292	473
8	770	e1490	632	e20	14	13	8.6	5.0	13	7.9	19	587
9	680	e1490	627	e19	14	13	8.6	5.7	7.9	7.9	8.6	582
10	643	1380	662	*19	14	13	8.6	5.7	7.2	7.2	7.9	576
11	627	1410	617	*18	17	13	8.6	5.7	7.2	8.6	7.2	576
12	622	1300	283	*16	20	13	8.6	15	8.6	14	6.4	587
13	627	1220	79	15	14	13	7.9	5.7	7.9	19	6.4	592
14	632	1470	88	13	14	30	7.9	5.0	7.9	20	207	597
15	632	1160	79	13	19	5.7	7.9	5.0	7.2	9.7	435	587
16	622	1320	66	12	17	5.7	7.9	5.7	6.4	17	487	592
17	643	1140	61	24	14	5.0	7.9	5.7	7.2	224	458	1080
18	632	1310	57	8.6	14	5.0	7.2	5.7	6.4	308	467	806
19	622	841	49	2.8	15	4.3	7.2	5.7	7.2	277	411	752
20	612	635	44	2.8	12	5.0	7.2	5.7	19	230	294	638
21	612	1080	42	5.0	12	5.7	6.4	5.7	11	258	415	689
22	643	758	42	2.1	12	5.7	6.4	5.7	5.7	170	508	968
23	513	1060	40	0.6	12	6.4	7.2	6.4	6.4	40	477	6230
24	566	889	39	0.6	13	7.2	7.2	7.2	5.7	277	381	28200
25	643	904	37	78	12	7.2	7.2	6.4	5.7	255	385	17700
26	643	896	35	61	13	7.2	7.2	6.4	5.7	283	481	16400
27	632	616	34	11	13	7.9	7.9	5.7	6.4	253	317	18700
28	696	914	e32	4.3	13	7.9	7.9	6.4	6.4	288	417	9110
29	632		e30	4.3	13	7.9	9.7	6.4	6.4	180	437	8260
30	e856	—	e30	7.9	13	7.9	7.2	7.2	7.9	40	478	8160
31	e858	—	e29	—	13	—	6.4	7.2	—	272	—	8140
Mean	662	1010	289	17.7	14	10	7.9	6.4	7.9	114	344	4338
Ac-Ft	38280	56060	17750	1051	859	596	485	395	470	6993	20440	266700

Maximum Discharge	Calendar year [illegible] c.f.s. December [illegible], 1955	Total Runoff in Acre-Feet	Calendar Year 410079 Water Year 186076

Division of Water Resources station located at Mile [illegible].5 above mouth. Period of record 193[illegible] to date.
e Estimated

TABLE 151

FLOW OF TUOLUMNE RIVER AT ROBERTS FERRY BRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	512	659	827	60	60	47	36	32	32	40	386	506
2	342	666	802	63	63	47	34	30	32	42	850	499
3	564	630	776	65	63	40	32	26	40	38	659	506
4	603	652	822	71	55	42	32	24	40	34	652	561
5	603	652	752	65	55	47	30	26	38	42	596	480
6	596	652	704	60	52	45	30	32	36	40	448	538
7	590	899	616	50	58	38	30	32	32	40	302	492
8	603	1450	645	50	58	40	30	32	32	38	236	616
9	710	1460	638	47	55	38	32	30	40	36	77	623
10	681	1390	652	50	55	42	34	26	38	38	55	616
11	630	1410	717	47	55	45	32	24	38	40	45	610
12	616	1280	533	47	52	45	30	28	34	38	40	603
13	610	1250	154	47	55	45	30	38	32	40	40	610
14	630	1330	113	38	47	45	28	38	38	45	47	610
15	638	1170	116	32	42	65	28	34	38	47	447	610
16	753	1270	102	30	47	47	32	30	36	50	540	603
17	666	1140	96	45	45	38	30	28	38	63	533	791
18	753	1250	90	52	45	32	28	26	40	386	514	913
19	731	1020	87	45	42	32	28	24	38	387	499	816
20	645	796	80	40	42	32	26	26	40	345	363	709
21	645	899	74	40	38	30	24	30	45	367	363	674
22	616	854	71	45	42	30	24	30	52	316	512	814
23	603	950	71	50	42	32	20	32	40	182	525	4860
24	538	907	71	42	42	32	22	30	34	195	480	27300
25	645	889	71	40	45	34	26	30	36	377	352	19500
26	674	882	71	124	47	38	28	30	42	360	392	15700
27	674	776	71	134	47	34	26	32	36	361	427	21200
28	710	772	68	63	50	34	24	36	38	353	427	10100
29	688		65	52	50	30	24	36	38	322	462	8350
30	724	—	65	52	50	34	28	36	40	182	497	8290
31	791	—	60	—	47	—	32	32	—	178	—	8290
Mean	638	998	325	54.9	49.9	39.3	28.7	30.3	37.8	162	392	4432
Ac-Ft	39240	55450	19990	3265	3066	2340	1765	1864	2247	9961	23380	272500

Maximum Discharge	Calender year 35,300 c.f.s. December 24, 1955	Total Runoff in Acre-Feet	Calendar Year	435068
			Water Year	204807

Division of Water Resources station located at Mile 39.9 above mouth. Period of record 1930 to date.

TABLE 152

FLOW OF TUOLUMNE RIVER AT HICKMAN BRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	609	772	908	117	123	108	96	98	94	100	370	577
2	448	778	866	119	125	110	100	98	92	100	778	556
3	590	735	844	119	125	108	98	96	94	98	650	558
4	705	740	872	127	125	104	98	96	96	96	645	631
5	700	735	849	119	123	108	94	96	94	96	613	524
6	695	720	772	117	121	108	96	98	92	98	536	613
7	705	868	675	110	127	102	96	98	92	100	266	571
8	700	1490	690	110	131	104	98	96	90	102	370	670
9	844	1490	710	110	127	102	96	96	94	102	148	685
10	805	1460	705	108	127	102	98	96	96	102	127	675
11	735	1450	735	108	125	102	96	92	96	102	114	675
12	725	1390	641	108	125	108	96	94	96	102	108	670
13	715	1330	232	112	123	108	96	96	92	104	110	680
14	715	1370	168	112	121	106	92	102	96	106	112	680
15	740	1280	161	110	117	125	90	98	98	125	349	680
16	878	1240	148	108	119	114	92	96	98	114	553	680
17	766	1260	144	117	117	100	96	96	98	117	558	745
18	854	1260	138	131	117	92	94	94	100	295	542	1050
19	860	1180	138	121	114	92	92	94	98	395	558	884
20	756	914	142	119	114	90	92	94	98	372	436	810
21	740	890	125	117	110	90	90	96	98	336	426	740
22	720	980	123	121	110	92	90	96	106	355	548	844
23	740	956	121	123	110	92	90	92	102	259	584	4060
24	613	1020	121	114	108	92	92	92	98	151	552	25300
25	750	914	121	112	108	92	94	94	98	368	397	22300
26	756	938	123	176	112	96	94	94	96	362	542	15200
27	735	926	123	194	110	96	94	98	94	380	496	22100
28	778	788	121	138	112	94	94	98	98	361	416	10600
29	766		119	119	110	94	92	96	98	386	523	8170
30	756	—	117	121	110	94	92	96	100	256	549	8040
31	964	—	119	—	108	—	94	94	—	148	—	8060
Mean	738	1067	383	121	118	101	94.3	95.8	96.4	200	433	4485
Ac-Ft	45350	59250	23550	7214	7248	6000	5796	5891	5736	12270	25740	275800

Maximum Discharge	Calender year 35,400 c.f.s. December 24, 1955 of record 54,000 c.f.s. December 8, 1950	Total Runoff in Acre-Feet	Calendar Year	479845
			Water Year	252765

Division of Water Resources station located at Mile 31.7 above mouth. Period of record 1932 to date.

TABLE 153

FLOW OF T OLUMNE RIVER AT MODESTO - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	734	929	1060	272	256	274	212	220	215	215	374	710
2	1080	917	1040	285	256	245	208	215	215	230	630	720
3	1270	914	1010	265	261	254	210	215	215	215	742	710
4	1010	899	976	267	250	258	210	215	220	215	731	784
5	917	887	1020	267	245	258	201	215	220	200	731	630
6	875	878	914	274	236	261	199	210	215	215	680	710
7	863	848	824	272	247	241	200	215	210	230	524	752
8	851	1400	815	265	233	225	214	215	210	215	497	773
9	962	1600	830	265	287	230	225	215	210	222	374	648
10	956	1620	821	272	280	230	236	205	220	222	284	837
11	1310	1560	845	261	269	239	232	205	220	222	252	826
12	1060	1580	864	252	250	243	228	210	225	230	238	815
13	929	1470	641	258	256	247	230	215	215	230	238	826
14	893	1400	399	252	261	241	214	215	210	230	245	815
15	890	1510	341	258	263	256	197	225	220	238	292	804
16	1310	1330	341	254	261	267	192	210	220	260	591	804
17	2470	1450	275	269	276	252	203	210	220	252	630	804
18	1350	1320	280	327	283	256	208	215	225	300	680	1140
19	2440	1490	320	344	276	252	199	220	230	497	690	994
20	1640	1190	291	317	276	243	210	215	225	467	640	960
21	1170	923	285	324	272	234	219	215	220	461	562	870
22	1000	1220	278	317	241	221	204	215	215	479	620	925
23	959	990	289	317	250	219	205	215	220	425	720	2770
24	818	1190	285	296	252	241	210	215	215	343	710	17800
25	760	1060	276	272	261	243	205	215	215	362	630	31400
26	905	1070	283	272	252	221	205	215	220	470	610	18900
27	899	1090	276	332	250	239	200	220	205	479	690	21000
28	884	866	276	327	252	221	210	235	205	479	572	17600
29	941		272	285	250	210	220	225	210	479	620	9760
30	893	—	274	252	245	201	210	220	215	445	670	8440
31	1070	—	276	—	252	—	210	225	—	340	—	8300
Mean	1133	1200	548	282	260	241	211	216	217	319	551	4569
Ac-Ft	69640	66650	33720	16800	15960	14320	12960	13280	12890	19640	32760	309500

Maximum Discharge	Calendar year 37,800 c.f.s. December 25, 1955 of record 57,000 c.f.s. December 9, 1950	Total Runoff in Acre-Feet	Calendar Year 614120 Water Year 369270

Station is maintained jointly by Division of Water Resources and the U. S. Geological Survey. Station is located at the Tidewater Southern Railroad bridge at Mile 15.92 above the mouth of the Tuolumne River and 0.6 mile downstream from the confluence of Dry Creek. Period of record 1910 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 154

FLOW OF TUOLUMNE RIVER AT TUOLUMNE CITY - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	740	1045	1060	335	320	310	270	270	265	270	350	710
2	1335	970	1090	350	315	295	270	265	265	275	480	740
3	1655	960	1080	345	315	295	275	265	275	275	815	725
4	1090	945	1050	330	315	305	270	260	275	265	805	750
5	990	930	1070	335	305	305	265	260	275	270	310	765
6	935	920	1010	335	300	305	260	260	265	270	790	740
7	905	890	930	330	315	300	260	265	265	280	685	795
8	890	1200	865	325	320	285	260	265	260	280	490	810
9	935	1610	880	330	335	280	265	265	260	280	495	915
10	1020	1650	875	335	335	285	275	260	265	285	365	915
11	1230	1605	875	335	325	285	270	260	265	285	325	895
12	1185	1625	930	320	310	290	280	260	275	290	315	880
13	1010	1540	825	320	310	290	275	255	270	290	310	870
14	945	1465	540	320	305	295	265	265	265	285	315	870
15	925	1595	425	325	315	295	260	265	265	285	310	860
16	1035	1435	445	325	310	295	260	260	275	295	455	855
17	2420	1510	375	330	315	295	265	260	270	295	760	850
18	1640	1415	360	355	315	295	265	250	280	290	720	1010
19	2020	1495	375	390	305	295	260	255	280	385	725	1150
20	2080	1285	365	380	305	285	260	265	280	490	725	1080
21	1385	1050	350	380	300	280	270	265	275	500	620	1015
22	1160	1205	340	395	300	275	265	265	280	485	580	990
23	1070	1100	345	370	290	270	260	265	280	490	700	1550
24	980	1210	335	350	290	280	265	260	285	425	740	12800
25	900	1150	330	335	300	290	260	260	285	355	695	23600
26	970	1125	330	330	290	290	250	260	285	465	585	20700
27	965	1145	330	360	300	290	255	265	270	480	670	20000
28	950	1005	335	370	310	285	250	280	265	505	650	19550
29	980		335	335	305	275	265	280	270	500	580	16150
30	960	—	330	315	305	265	265	265	275	510	655	7500
31	1050	—	335	—	305	—	265	270	—	425	—	7500
Mean	1173	1253	617	343	309	290	265	263	272	357	584	4795
Ac-Ft	72109	69580	37924	20410	19012	17226	16204	16195	16195	21977	34750	294827

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 636469 Water Year 401543

Station is maintained jointly by Division of Water Resources, City of San Francisco (Hetch Hetchy Water Supply), and Turlock Irrigation District. Station is at highway bridge, 3.45 miles above the mouth. Period of record 1930 to date. Records for 1955 computed by City of San Francisco.

TABLE 155

FLOW OF DRY CREEK NEAR MODESTO (CLAUSS ROAD BRIDGE) - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39	40	24	47	18	52	37	37	36	20	11	34
2	1840	42	56	46	16	47	31	37	34	19	11	37
3	489	48	50	48	15	53	35	35	31	13	17	39
4	165	54	39	50	14	58	30	36	34	25	18	39
5	91	49	33	43	13	62	26	28	35	25	17	40
6	67	41	29	56	17	62	38	27	28	28	19	46
7	46	36	26	58	24	50	35	34	24	27	21	65
8	45	33	24	59	50	43	39	27	25	20	20	69
9	40	30	24	57	57	46	37	25	23	27	22	68
10	104	28	22	57	48	55	37	23	18	26	25	66
11	505	26	21	56	40	59	50	25	18	29	27	66
12	187	25	21	57	29	65	48	32	29	28	29	63
13	101	24	20	54	39	62	43	27	34	26	31	57
14	76	23	21	50	42	60	29	25	29	25	34	49
15	67	26	20	56	47	71	27	19	33	25	35	50
16	869	27	18	57	50	69	30	24	29	22	39	50
17	1380	26	16	57	56	67	31	24	27	23	41	50
18	438	29	14	88	60	67	32	29	33	27	42	52
19	1590	58	20	101	60	75	29	32	36	32	39	57
20	602	54	33	79	52	69	34	31	29	29	31	60
21	295	41	31	60	41	65	29	34	29	25	26	62
22	162	34	38	81	34	54	33	29	27	22	26	73
23	116	29	36	77	45	58	34	25	25	19	28	2840
24	91	26	36	59	54	67	34	23	24	21	31	7160
25	75	26	36	44	56	60	34	30	25	20	30	3980
26	64	25	39	33	51	48	34	46	26	14	30	716
27	57	25	36	24	52	48	22	43	24	22	30	2270
28	52	24	38	19	51	46	18	42	23	24	31	839
29	53		44	15	51	34	25	40	24	22	32	328
30	51	—	48	14	50	34	24	45	24	17	33	199
31	43	—	47	—	50	—	24	47	—	13	—	256
Mean	316	33.9	31.0	53.4	41.4	56.9	32.5	31.6	27.9	23.1	27.5	636
Ac-Ft	19440	1882	1904	3178	2543	3384	2001	1946	1658	1418	1638	39230

Maximum Discharge	Calendar year 7710 c.f.s. December 23, 1955.	Total Runoff in Acre-Feet	Calendar Year Water Year	80222 44329

Division of Water Resources station located at Clauss Road Bridge, 5.4 miles above Modesto. Dry Creek enters the Tuolumne River above the Modesto gaging station at Mile 16.5R. Period of record (including a former station located 2.9 miles above mouth) 1930 to date.

TABLE 156

FLOW OF STANISLAUS RIVER BELOW MELONES POWERHOUSE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	669	585	610	1320	690	3190	1240	1160	552	286	94	97
2	1110	490	86	1300	510	2520	1240	1150	210	286	95	311
3	1090	184	88	1290	433	2230	1240	1140	186	292	84	403
4	1060	601	649	1260	419	2530	1240	1140	189	286	38	259
5	1050	21	607	1230	522	3350	1230	1140	222	286	15	57
6	916	272	612	1170	840	4160	1240	1130	250	237	106	352
7	188	611	660	1160	1070	4620	1240	1130	261	207	61	484
8	330	515	646	1160	1080	4750	1250	1120	264	177	84	720
9	419	252	795	1160	1090	4710	1250	1120	254	172	84	720
10	372	434	937	1170	1160	4660	1250	1110	326	51	85	494
11	600	489	867	1210	1280	3950	1240	1100	554	15	84	730
12	68	21	930	1240	1420	3140	1220	1100	582	130	85	725
13	344	447	821	1250	1510	2770	1220	1090	599	104	85	278
14	349	504	1150	1290	1500	2500	1220	1090	574	140	129	393
15	355	400	883	1320	1490	2290	1220	1090	514	104	178	420
16	655	576	1030	1340	1490	2050	1220	1080	462	106	156	203
17	905	708	676	1350	1570	1840	1220	1080	418	106	126	234
18	342	1070	671	1200	1640	1780	1210	1070	378	104	155	471
19	1020	1070	671	1100	1650	1780	1210	1060	131	126	176	705
20	1060	1070	671	1060	1670	1780	1210	1060	28	127	178	740
21	1040	1060	671	1070	1680	1780	1200	1050	26	103	179	750
22	359	1050	671	1100	1700	1690	1200	1040	30	101	127	2450
23	280	929	676	1080	2640	1660	1190	1030	25	97	250	45000
24	600	658	676	1090	4780	1470	1190	1030	182	90	271	20000
25	416	690	676	1090	3420	1390	1190	1020	240	59	203	5000
26	593	698	680	1090	3120	1390	1180	1010	213	82	176	14000
27	231	458	840	1090	3050	1380	1180	996	250	82	83	12000
28	438	1040	896	835	3530	1300	1180	984	264	94	130	8000
29	558		1060	700	4550	1250	1170	974	278	105	131	4500
30	475	—	1220	690	4960	1250	1160	957	286	94	228	4200
31	329	—	1320	—	4550	—	1160	946	—	99	—	3500
Mean	588	604	756	1147	1968	2505	1213	1071	292	140	129	4135
Ac-Ft	36140	33530	46500	68260	121000	149100	74600	65850	17350	8620	7690	254300

Maximum Discharge	Calendar year 62,800 c.f.s. December 23, 1955 of record 62,800 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year Water Year	882940 658010

U. S. Geological Survey and Pacific Gas and Electric Company cooperative station located one mile downstream from Melones Dam. Drainage area is 898 square miles. Period of record 1931 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 157

FLOW OF STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2130	154	942	31	198	1560	26	26	37	21	78	228
2	1330	300	131	32	184	825	25	30	34	30	76	103
3	1120	217	130	34	50	617	25	30	28	34	98	385
4	1070	51	340	32	32	681	28	31	22	31	127	524
5	1040	251	634	31	31	1230	25	30	20	28	161	100
6	1020	42	533	31	30	1950	26	25	16	26	139	410
7	396	53	626	31	30	2440	28	30	13	28	103	527
8	241	256	631	30	32	2880	26	30	16	30	83	786
9	388	214	641	30	34	2850	28	31	15	25	59	856
10	758	50	1060	30	32	2700	28	31	17	23	89	533
11	688	164	633	30	34	2110	30	31	17	13	89	734
12	411	178	1080	30	31	1350	25	34	18	13	106	717
13	127	32	568	30	34	1010	21	28	23	10	139	380
14	207	159	1100	31	55	794	24	30	18	47	180	336
15	137	186	835	31	57	617	26	32	15	297	177	364
16	899	115	1070	31	50	471	23	32	21	286	529	304
17	925	443	715	36	41	184	25	37	21	120	483	174
18	1050	744	324	46	36	69	25	37	24	73	48	152
19	1220	948	51	44	36	48	25	36	17	69	13	533
20	923	1010	32	37	37	42	28	37	13	61	11	828
21	786	1010	28	36	38	40	25	36	11	55	10	825
22	553	1010	28	286	40	42	20	34	6.8	71	11	3350
23	73	1000	28	169	41	36	18	32	3.7	95	13	27700
24	95	598	26	131	1030	36	20	34	4.6	127	304	36200
25	256	670	26	127	2040	34	24	37	77	95	256	12500
26	211	700	24	146	947	30	25	38	57	81	194	9860
27	240	573	23	227	1250	25	26	40	30	69	173	13200
28	44	1050	24	262	1360	25	26	42	28	64	89	7570
29	92		25	98	2280	30	24	42	28	59	106	5190
30	240	—	25	154	3010	26	26	37	28	64	123	4710
31	196	—	30	—	2710	—	25	32	—	73	—	4340
Mean	609	435	399	76.5	512	832	25.0	33.3	24.0	68.3	135	4336
Ac-Ft	37420	24150	24520	4550	31460	49490	1539	2047	1426	4201	8027	266600

Maximum Discharge	of record 52,000 c.f.s. November 21, 1950	Total Runoff in Acre-Feet	Calendar Year	455430
			Water Year	217596

Division of Water Resources station located at highway bridge, Mile 47.0 above mouth or 5.7 miles above Oakdale. Period of record 1930 to date.

TABLE 158

FLOW OF STANISLAUS RIVER AT RIVERBANK - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1100	165	1100	85	243	2090	83	73	64	67	83	209
2	1860	318	505	79	270	919	81	73	66	66	83	154
3	1240	291	223	81	183	665	85	72	64	66	81	272
4	1140	130	206	83	118	569	85	68	59	68	101	438
5	1110	270	656	78	94	923	86	70	59	66	102	234
6	1080	130	669	74	89	1660	85	72	55	71	98	135
7	781	100	642	73	90	2350	86	68	52	68	94	569
8	329	274	700	71	121	2710	84	68	50	71	86	570
9	433	258	712	73	124	2750	81	67	53	67	83	778
10	723	126	1030	78	107	2610	86	73	53	68	81	646
11	624	189	765	75	96	2440	81	74	54	70	83	609
12	705	227	1060	74	93	1660	83	70	55	65	81	705
13	251	116	772	78	92	1160	80	68	55	66	81	606
14	275	127	1030	80	108	873	79	68	56	62	86	344
15	200	258	948	76	121	662	75	71	61	74	83	406
16	702	168	1100	81	118	503	81	67	62	93	84	429
17	1050	343	923	86	108	388	80	73	65	96	94	253
18	945	619	578	104	102	157	75	73	67	88	83	196
19	1440	885	233	102	102	111	76	70	68	84	68	356
20	1070	1040	160	97	104	96	74	64	64	81	60	722
21	862	1060	118	97	105	81	74	67	60	78	56	885
22	758	1080	104	195	108	100	72	61	60	79	52	1690
23	275	1070	97	245	111	e94	74	61	e63	90	51	22800
24	145	786	94	177	1580	e86	75	60	e63	89	143	56600
25	311	727	90	160	2620	e85	74	64	e63	88	261	14500
26	219	736	84	167	1140	e84	68	67	e64	85	213	8860
27	300	762	81	239	1410	e80	71	70	e64	84	198	12500
28	140	892	76	330	1190	e80	73	67	e64	81	128	8490
29	142		80	223	1820	79	73	66	65	81	130	5610
30	254	—	80	206	2720	80	73	66	65	79	144	4760
31	253	—	80	—	2750	—	73	66	—	80	—	5020
Mean	668	470	484	122	582	868	78.3	68.3	60.4	76.5	102	4353
Ac-Ft	41090	26080	29740	7273	35780	51660	4812	4199	3596	4703	6091	268400

Maximum Discharge	Calendar year 85,[illegible] c.f.s. December 23, 1955 of record 85,8[illegible] c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year	513424
			Water Year	251476

Division of Water Resources station located at Mile [illegible] above mouth. Period of record 1940 to date.
e Estimated

TABLE 159

FLOW OF STANISLAUS RIVER AT RIPON - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	452	319	1090	163	470	2580	160	139	121	134	132	228
2	2000	303	934	162	530	1670	171	127	136	144	138	288
3	1450	380	435	184	528	1080	171	111	132	122	139	245
4	1250	326	348	184	420	842	174	111	124	113	144	374
5	1190	248	504	163	270	929	164	120	120	115	160	472
6	1160	317	698	151	206	1450	177	133	107	121	164	288
7	1100	214	664	145	182	2100	166	148	107	111	160	484
8	600	216	723	142	283	2520	160	145	110	108	150	562
9	514	323	745	162	258	2710	151	117	111	113	136	776
10	657	306	793	179	209	2720	151	103	108	113	133	849
11	802	214	1060	151	177	2670	152	106	107	122	132	626
12	783	263	824	154	172	2220	150	111	108	127	136	740
13	540	272	1090	134	156	1630	134	115	114	122	151	750
14	389	187	800	160	150	1280	124	124	120	130	164	540
15	368	233	1150	172	169	1010	120	118	127	132	164	464
16	490	278	971	162	187	812	126	120	124	163	157	478
17	1080	263	1150	160	169	635	146	118	127	203	158	440
18	1030	460	866	212	148	466	146	127	144	158	163	348
19	1440	738	570	267	151	364	127	132	142	146	151	319
20	1300	968	431	195	132	315	132	145	134	142	138	527
21	1040	1050	301	196	138	274	127	151	124	140	127	784
22	912	1080	236	272	138	267	122	145	117	134	122	897
23	670	1090	212	359	148	260	121	124	110	144	122	3060
24	385	1060	204	342	376	255	133	117	110	148	121	47000
25	348	769	193	294	2120	212	126	133	107	140	209	22800
26	389	790	176	283	1710	209	126	140	111	139	294	5670
27	370	812	169	278	1280	206	126	151	124	138	288	17500
28	366	747	164	332	1330	195	121	156	122	157	265	13400
29	260		150	468	1580	180	122	156	126	145	201	7540
30	283	—	152	401	2320	171	118	146	126	139	206	5450
31	344	—	156	—	2750	—	126	132	—	134	—	5120
Mean	773	508	579	221	608	1074	141	130	120	135	164	4484
Ac-Ft	47530	28220	35620	13140	37400	63930	8670	7980	7140	8320	9770	275700

Maximum Discharge	Calender year 62,500 c.f.s. December 24, 1955 of record 62,500 c.f.s. December 24, 1955	Totel Runoff in Acre-Feet	Calender Yeer 543420 Water Yeer 310590

Station meinteined jointly by Division of Water Resources end the U. S. Geological Survey. Station is at Highwey 99 and is 15.7 miles above mouth of river. Period of record 1940 to date. Records for 1955 computed by U. S. Geologicel Survey.

TABLE 160

FLOW OF STANISLAUS RIVER NEAR MOUTH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	425	347	647	122	434	2480	119	58	76	106	130	243
2	1260	299	1040	120	409	1840	105	52	105	157	130	272
3	1550	349	750	111	508	1150	117	40	92	89	130	277
4	1230	352	445	114	431	903	129	32	78	74	144	306
5	1150	291	400	86	336	821	109	30	59	73	*153	428
6	1110	301	631	76	258	1140	84	42	52	65	*151	387
7	1080	254	631	75	213	1710	76	82	59	92	*153	321
8	825	208	645	92	289	2210	57	67	46	105	*155	549
9	561	279	680	122	329	2440	68	78	51	137	*157	628
10	574	313	718	175	254	2500	137	44	60	130	*158	787
11	787	265	955	132	175	2430	87	38	100	155	*162	680
12	747	270	769	129	132	2220	60	34	90	151	*164	662
13	712	303	989	125	119	1630	58	35	44	122	*166	715
14	454	258	769	94	132	1240	73	51	45	99	*166	628
15	419	243	989	106	151	1020	48	57	65	146	*167	480
16	376	311	911	99	122	833	63	37	92	149	*169	474
17	840	289	989	153	129	648	92	37	89	176	*171	480
18	1060	368	848	198	102	496	93	32	139	173	175	389
19	1160	581	634	252	93	431	73	54	117	137	176	331
20	1420	829	470	254	97	339	54	76	65	137	167	395
21	1120	980	373	258	97	263	40	108	74	139	157	634
22	947	1030	239	296	146	196	45	89	82	148	14[illegible]	773
23	833	1060	184	362	116	162	36	53	83	151	146	*4800
24	533	1060	175	395	86	134	69	74	65	113	144	*50000
25	397	825	157	362	1130	188	69	53	106	132	158	*21000
26	419	747	160	344	1720	178	65	54	119	106	256	*8300
27	373	821	146	316	1070	148	63	57	117	100	287	*16000
28	400	887	122	342	1220	121	54	105	119	100	287	*14000
29	331		108	408	1260	124	47	96	125	116	263	*8200
30	306	—	103	408	1830	129	38	97	116	113	234	*4750
31	342	—	100	—	2450	—	56	73	—	125	—	*5000
Mean	766	5[illegible]4	[illegible]61	204	514	1007	73.7	59.8	84.3	123	174	469
Ac-Ft	47090	28010	33850	12170	31590	59930	4530	3670	5018	7577	10360	283400

Maximum Discharge		Totel Runoff in Acre-Feet	Calender Yeer 527204 Water Yeer 285537

Division of Water Resources station located 1.9 miles above the mouth. Period of record September 1951 to date. (Prior records available at other sites for 1930 to 1950.) * Estimated

TABLE 161

FLOW OF KINGS RIVER AT PIEDRA - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	496	134	444	1820	1810	4320	5150	2490	2070	208	47	46
2	195	130	420	1840	1780	4690	5200	2410	2020	198	42	39
3	80	126	424	1660	1200	4660	5430	2760	1950	198	15	38
4	74	128	460	1530	1230	4640	5150	2690	1930	184	11	33
5	92	128	523	1590	1230	4610	4850	2670	1850	180	11	29
6	88	132	523	1600	1230	4630	4240	2560	1600	180	11	41
7	86	132	528	1550	1150	4610	4230	2610	1540	180	11	32
8	83	206	595	1570	938	4710	4200	2520	1440	92	11	44
9	86	224	560	1480	820	4790	4230	2350	1230	78	11	52
10	122	224	716	1430	732	4980	4050	2310	1220	76	11	43
11	88	232	727	1430	1090	5100	3860	2310	1160	68	11	46
12	81	265	1020	1590	1330	5250	3810	2240	1070	64	11	44
13	96	380	1490	1610	2000	5250	3830	2550	1020	66	12	44
14	92	456	1510	1640	2030	5260	3790	2500	1110	64	12	46
15	86	514	1720	1620	2280	5280	3790	2510	1130	64	11	48
16	168	550	1740	1630	2480	5260	2980	2360	1110	64	10	66
17	92	800	1730	1640	2470	5150	2960	2380	1100	64	12	70
18	267	420	1720	1650	2450	5260	2910	2330	1110	66	11	70
19	324	380	1750	1580	2560	5600	2910	2360	1090	59	12	72
20	180	404	1740	1560	3190	5730	2930	2320	862	58	12	72
21	130	404	1760	1510	3430	5640	2810	2420	732	58	13	81
22	102	388	1880	1390	3630	5620	2790	2410	478	57	12	118
23	92	448	1980	1390	3730	5620	2780	2410	412	57	22	5480
24	99	469	2070	1400	3910	5750	2900	2380	400	57	36	5280
25	104	456	2040	1400	4110	5960	3260	2240	329	57	37	2230
26	121	469	1990	1740	4240	5530	3310	2250	280	50	38	838
27	126	546	1820	1820	4350	5570	3320	2140	274	48	34	727
28	132	550	2000	1820	4230	5580	3210	2130	260	46	37	682
29	134		2200	1860	4110	5750	3210	2130	257	44	38	648
30	132	—	2210	1880	4480	5710	3190	2170	260	46	38	620
31	134	—	2050	—	4720	—	3050	2160	—	47	—	432
Mean	135	346	1367	1609	2567	5228	3689	2422	1043	89.7	20.1	565
Ac-Pt	8300	19230	84040	95760	157800	311100	226800	148900	62070	5520	1200	34730

Maximum Discharge	Calendar year 9380 c.f.s. December 23, 1955 of record 91,000 c.f.s. November 19, 1950	Total Runoff in Acre-Feet	Calendar Year	1155450
			Water Year	1126090

U. S. Geological Survey and Division of Water Resources cooperative station located 0.5 mile downstream from highway bridge at Piedra. The Kings River flows into the Tulare Lake area and during high stages into the San Joaquin River via James By-Pass. Drainage area 1694 square miles. Period of record 1895 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 162

FLOW OF KAWEAH RIVER NEAR THREE RIVERS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	604	207	347	576	698	1150	424	75	37	23	24	172
2	458	200	367	604	620	975	403	74	36	22	24	304
3	232	172	343	485	598	989	375	72	34	22	24	153
4	182	160	321	438	722	1240	339	69	33	22	27	118
5	167	167	318	395	792	1620	310	71	31	23	26	112
6	149	158	310	391	926	1910	287	90	30	24	26	436
7	136	153	318	403	1190	2160	271	86	32	23	27	484
8	129	160	343	428	1010	2140	256	77	34	21	26	230
9	123	170	375	510	926	2160	250	71	33	21	24	1050
10	167	179	383	626	1110	2000	241	66	31	22	24	446
11	151	189	387	565	1360	1640	232	61	30	22	26	300
12	138	192	367	543	1600	1400	224	60	28	22	28	256
13	138	197	359	632	1670	1200	216	54	27	26	32	238
14	131	210	363	680	1490	1030	205	5	24	23	77	221
15	131	227	347	710	1070	1060	200	53	29	23	71	207
16	268	515	324	710	926	926	192	51	30	24	57	194
17	197	4090	297	609	891	891	182	48	31	22	71	182
18	315	1450	300	609	1030	898	172	47	32	21	72	172
19	328	786	300	516	1440	884	160	47	41	21	88	165
20	247	592	297	533	1670	857	151	46	30	24	108	170
21	213	470	274	510	1890	812	142	43	32	23	138	179
22	194	415	281	752	2020	760	130	42	33	29	160	2570
23	182	375	297	638	2040	662	136	41	30	26	97	42800
24	205	339	332	753	1840	626	131	42	29	22	82	15100
25	202	318	407	805	1340	570	120	43	30	22	77	8210
26	202	324	470	792	1190	521	114	46	28	23	77	5590
27	205	343	548	662	1 20	500	106	45	27	23	81	4540
28	207	351	538	698	1770	490	99	45	26	28	88	3330
29	213		54	680	1910	470	91	42	25	24	91	2400
30	213	—	560	626	1820	446	86	40	24	24	88	1810
31	210	—	510	—	1460	—	67	39	—	24	—	1660
Mean	214	468	372	597	1304	1100	204	56.3	31.0	23.2	62.0	3035
Ac-Pt	13130	26000	22870	35550	80210	65430	12540	3460	1840	1430	3690	186600

Maximum Discharge	Calendar year 80, 00 c.f.s. December 23, 19 of record 80,700 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year	452800
			Water Year	270060

U. S. Geological Survey and Division of Water Resources cooperative station located three miles southwest of Three Rivers post office. Kaweah River is a tributary of the Tulare Lake area. Period of record 1936 to date. Prior records available at a site two miles upstream. Records for 1955 were computed by the U. S. Geological Survey.

TABLE 163

FLOW OF TULE RIVER NEAR PORTERVILLE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	168	93	129	110	170	127	19	0.8	0.1	0.1	4.6	111
2	261	96	129	113	160	113	18	0.8	0.1	0.1	4.6	152
3	115	83	120	107	152	100	13	0.7	0.1	0.1	5.5	70
4	87	77	118	100	164	96	13	0.7	0.1	0.1	5.5	55
5	77	74	113	94	164	96	13	0.6	0.1	0.1	5.9	45
6	72	73	110	93	172	102	13	0.6	0.1	0.1	5.9	399
7	66	71	110	87	244	112	10	0.6	0.1	0.1	5.9	323
8	62	70	115	82	256	110	8.9	0.6	0.1	0.1	6.4	129
9	60	71	120	82	224	104	8.9	0.4	0.1	0.3	5.5	486
10	83	72	122	79	217	98	8.9	0.4	0.1	0.3	5.5	244
11	84	74	134	75	220	92	8.3	0.4	0.1	0.4	5.7	152
12	70	74	134	74	234	84	7.3	0.4	0.1	0.4	6.6	118
13	67	77	125	77	236	79	6.6	0.3	0.1	0.5	7.1	102
14	64	80	122	83	227	73	5.9	0.3	0.1	0.5	30	92
15	63	88	113	80	189	70	5.7	0.3	0.1	0.4	29	84
16	166	117	105	78	164	67	5.5	0.3	0.1	0.5	24	78
17	220	1220	99	77	148	61	5.0	0.3	0.1	0.6	26	70
18	178	637	94	92	134	58	5.0	0.3	0.1	0.7	28	68
19	217	309	92	83	136	53	4.6	0.3	0.1	0.7	29	63
20	132	227	94	84	144	48	4.6	0.3	0.1	0.8	34	59
21	102	185	93	87	150	43	3.4	0.3	0.1	1.1	46	60
22	93	160	92	185	172	39	1.9	0.3	0.1	1.1	57	376
23	87	150	90	158	176	35	1.9	0.3	0.1	1.1	38	9090
24	87	134	92	158	174	34	1.6	0.2	0.1	1.3	31	2230
25	88	123	96	152	152	30	1.1	0.2	0.1	1.7	29	1260
26	87	142	105	176	136	27	0.9	0.2	0.1	2.0	27	1100
27	86	146	113	154	129	25	1.0	0.2	0.1	3.4	28	1180
28	86	154	113	154	131	24	0.9	0.2	0.1	4.4	29	840
29	87		120	150	131	23	1.0	0.2	0.1	3.7	28	608
30	88	—	118	148	132	22	1.0	0.2	0.1	3.4	28	476
31	92	—	108	—	129	—	0.9	0.2	—	4.2	—	421
Mean	106	174	111	109	173	68.2	6.4	0.4	0.1	1.1	20.5	663
Ac-Ft	6540	9670	6820	6490	10650	4060	396	24	6	68	1220	40740

Maximum Discharge	Calendar year 24,200 c.f.s. December 23, 1955 of record 25,500 c.f.s. November 19, 1950	Total Runoff in Acre-Feet	Calendar Year 86684 Water Year 50251

U. S. Geological Survey and Division of Water Resources cooperative station located at highway bridge one mile upstream from the South Fork. Drainage area is 266 square miles. Period of record 1901 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 164

FLOW OF TULE RIVER AT WORTH BRIDGE - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	139	117	171	139	188	131	7.6	0.2			0.1	132
2	370	117	171	143	188	113	7.6	0.3			1.2	222
3	159	102	163	139	179	99	6.4	0.1			3.2	95
4	113	92	159	127	188	92	6.4	0			4.0	73
5	95	89	155	113	192	89	6.4	0			4.4	53
6	89	85	151	109	205	95	7.0	0			5.4	586
7	85	82	147	106	248	102	6.4	0			4.9	483
8	82	79	150	102	230	106	5.9	0			5.4	217
9	79	79	163	102	248	95	4.9	0			4.9	584
10	113	79	167	89	239	89	5.4	0			3.6	309
11	120	79	179	69	239	85	4.4	0			3.2	209
12	99	82	188	61	248	79	3.6	0	N	N	4.9	171
13	95	82	175	69	253	69	3.6	0	0	0	5.9	147
14	82	92	167	82	248	69	3.2	0			13	135
15	69	106	159	82	217	58	4.0	0			17	120
16	202	127	143	73	192	58	3.6	0	F	F	16	109
17	171	1710	127	69	175	53	3.2	0	L	L	24	99
18	220	949	124	89	159	46	3.6	0	0	0	26	92
19	270	397	124	82	159	41	3.2	0	W	W	21	85
20	171	290	135	85	159	36	3.2	0			31	79
21	131	239	131	89	163	31	2.8	0			51	79
22	117	213	131	200	179	26	1.8	0			85	410
23	106	192	127	179	184	21	1.6	0			51	13400
24	109	175	131	179	184	20	1.2	0			39	3020
25	109	167	135	175	163	16	1.2	0			29	1670
26	109	179	143	200	147	12	0.9	0			21	1380
27	106	184	159	179	135	11	0.6	0			19	1440
28	102	200	155	179	135	10	0.6	0			22	1010
29	106		163	163	131	9.4	0.6	0			25	770
30	104	—	159	163	135	8.8	0.5	0			26	556
31	117	—	130	—	135	—	0.3	0	—		—	497
Mean	130	224	152	121	190	60.0	3.6	0.0	0	0	19.1	911
Ac-Ft	8010	12660	9320	7210	11690	3510	222	1	—	0	1330	56000

Maximum Discharge	Calendar year 27,000 c.f.s. December 23, 1955 of record 27,000 c.f.s. December 23, 1955	Total Runoff in Acre-Feet	Calendar Year 109953 Water Year 69290

U. S. Geological Survey and Division of Water Resources cooperative station located one mile above the head of Porter Slough and 2.2 miles downstream from the junction of South Fork. Period of record 1944 to date. Records for 1955 computed by U. S. Geological Survey.

TABLE 165

FLOW OF TULE RIVER AT TURNBULL STATION - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1		0										0
2		0										0
3		0										0
4		0										0
5		0										0
6		0										0
7		0										0
8		0										0
9		0										0
10		0										0
11		0										0
12		0										0
13	N	0	N	N	N	N	N	N	N	N	N	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15		0										0
16		0										0
17	F	0	F	F	F	F	F	F	F	F	F	0
18	L	0	L	L	L	L	L	L	L	L	L	0
19	0	22	0	0	0	0	0	0	0	0	0	0
20	W	18	W	W	W	W	W	W	W	W	W	0
21		0.2										0
22		0										0
23		0										0
24		0										914
25		0										1940
26		0										1910
27		0										1620
28		0										1460
29												1300
30		—										1020
31		—		—		—			—		—	682
Mean	0	1.4	0	0	0	0	0	0	0	0	0	350
Ac-Ft	0	80	0	0	0	0	0	0		0	0	21510

Maximum Discharge	Maximum discharge calendar year 2090 c.f.s. December 25, 1955.	Total Runoff in Acre-Feet	Calendar Year 21590 Water Year 80

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located 1200 feet downstream from the Corcoran-Angiola Highway bridge, 39.2 miles downstream from the junction of South Fork. This station measures inflow to Tulare Lake area and at times the flows are a combination of direct Tule River water, Kaweah River water via Elk Bayou, and Kings River water via Homeland Canal, and waste water from Tulare Irrigation District. Period of record 1942 to date. Records for 1955 computed by Division of Water Resources.

TABLE 166

FLOW OF KERN RIVER NEAR BAKERSFIELD - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	317	346	426	847	597	1095	976	451	192	242	168	300
2	423	362	436	847	575	1001	945	419	179	207	169	416
3	384	337	424	796	558	929	949	451	182	196	172	323
4	317	296	426	754	570	884	945	499	182	187	172	273
5	291	304	423	714	568	907	957	509	196	179	175	260
6	290	326	408	675	566	1038	948	520	288	175	178	362
7	269	319	406	667	579	1292	911	556	255	155	190	583
8	265	319	415	663	575	1513	851	537	256	151	258	497
9	273	320	422	638	567	1730	808	485	292	150	265	451
10	286	324	445	682	562	1797	730	464	299	149	264	598
11	286	345	471	698	562	1735	749	473	336	154	255	494
12	296	342	557	660	560	1480	800	451	337	164	256	459
13	266	344	639	632	616	1335	795	437	283	158	261	426
14	283	352	658	627	702	1286	786	424	276	159	277	400
15	301	365	640	641	792	1230	750	482	228	163	212	385
16	359	410	618	643	757	1179	703	479	214	162	206	367
17	326	507	623	638	778	1248	669	466	214	167	227	351
18	346	592	617	635	734	1242	598	429	206	166	215	347
19	380	589	599	609	729	1249	563	429	196	162	229	331
20	340	539	596	611	766	1242	533	427	169	165	248	308
21	324	485	612	634	892	1195	512	433	166	167	265	317
22	317	453	552	624	964	1139	509	422	166	172	284	345
23	340	422	554	593	1026	1110	556	400	168	174	241	498
24	349	418	559	585	1085	1127	546	354	164	164	234	584
25	347	420	591	568	1126	1116	538	324	160	161	231	588
26	345	425	636	574	1090	1107	548	300	158	157	225	585
27	334	431	686	583	1024	1091	544	222	158	163	233	609
28	335	429	724	583	993	1079	535	211	183	167	237	560
29	340		723	586	1048	1018	527	193	205	169	240	480
30	347	—	738	592	1135	1005	508	198	214	169	239	490
31	344	—	856	—	1169	—	471	192	—	169	—	497
Mean	322	397	564	653	784	1213	704	408	217	169	229	435
Ac-Ft	19800	22060	34670	38870	48190	72200	43260	25060	12940	10400	13600	26740

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 367790 Water Year 366595

Kern County Land Company station located five miles northeast of Bakersfield (also known as Kern River at First Point). Drainage area 2420 square miles. Kern River is a tributary of the Tulare Lake basin. Period of record 1893 to date. Records for 1955 computed by Kern County Land Company. All flows are computed from noon to noon beginning at noon of day shown.

TABLE 167

DELIVERY FROM FRIANT-KERN CANAL TO TULE RIVER - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1			0	305	0	0	497	468	0			
2			0	295	0	0	497	462	0			0
3			0	309	0	0	497	462	0			0
4			0	315		0	477	165	67			0
5			0	309	0	0	465	0	500			0
6			0	300	0	0	453	0	500			0
7			154	292	0	0	450	0	500			0
8			264	283	0	0	451	0	500			0
9			264	281	0	93	444	103	500			0
10			264	283	0	502	447	492	498			0
11			264	54	0	500	459	492	484			0
12			251	0	0	484	466	495	139			0
13	N	N	356	0	0	453	471	474	0	N	N	0
14	0	0	361	0	0	433	471	460	0	0	0	0
15			363	0	0	442	134	460	0			0
16			370	0	0	468	0	460	0			0
17	F	F	375	0	0	477	0	460	0	F	F	0
18	L	L	375	0	0	448	0	448	0	L	L	0
19	0	0	375	0	0	435	67	447	0	0	0	0
20	W	W	377	0	357	433	500	444	0	W	W	0
21			373	0	433	445	500	432	0			0
22			342	0	447	466	489	429	0			0
23			326	0	463	477	487	438	0			*450
24			324	0	495	481	483	447	0			*310
25			343	0	465	140	477	186	0			0
26			366	0	432	0	478	0	0			0
27			375	0	427	0	465	0	0			0
28			370	0	411	0	465	0	0			0
29			363	0	385	0	472	0	0			0
30		—	346	0	105	88	472	0	0			0
31		—	333	—	0	—	474	0	—		—	0
Mean	0	0	268	99.2	139	242	403	281	123	0	0	24.5
Ac-Ft	0	0	16457	5903	8549	14420	24810	17306	7315	0	0	1500

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 96260 Water Year 94760

This flow is the delivery from Friant-Kern Canal into Tule River under contract agreements with the U. S. Bureau of Reclamation. This point of delivery is located on the Tule River approximately four miles west of Porterville. Records for 1955 computed by U. S. Bureau of Reclamation.

* Estimated

TABLE 168

DELIVERY FROM FRIANT-KERN CANAL TO PORTER SLOUGH - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1		0				0					1.8	
2		0				0					1.2	
3		0				0					0	
4		0				0					0	
5		0				0					0	
6		0				0					0	
7		0				0					0	
8		0				0					0	
9		0				0					0	
10		0				0					0	
11		0				0					0	
12		0				0					0	
13	N	0	N	N	N	22	N	N	N	N	0	N
14	0	0	0	0	0	49	0	0	0	0	0	0
15		0				49					0	
16		0				48					0	
17	F	0	F	F	F	38.6	F	F	F	F	0	F
18	L	0	L	L	L	0	L	L	L	L	0	L
19	0	0	0	0		0	0	0	0	0	0	0
20	W	0	W	W	W	0	W	W	W	W	0	W
21		0				0					0	
22		0				0					0	
23		0				0					0	
24		0				0					0	
25		0				0					0	
26		23				0					0	
27		35				0					0	
28		21				0					0	
29						0					0	
30		—				0					0	
31		—		—		—			—		—	
Mean		1.8	0	0	0	1.6	0	0	0	0	0.1	0
Ac-Ft	0	157	0	0	0	352	0	0	0	0	6	0

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 515 Water Year 1151

This flow is the delivery from Friant-Kern Canal into Porter Slough under contract agreements with the U. S. Bureau of Reclamation. This point of delivery is at the intersection of Porter Slough with the Friant-Kern Canal approximately four miles west of Porterville. Records for 1955 computed by U. S. Bureau of Reclamation.

TABLE 169

FLOW OF SOUTH FORK KINGS RIVER BELOW EMPIRE WEIR #2 - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1								0	20			
2								0	20			
3								0	20			
4								0	20			
5								0	20			
6								0	20			
7								0	19			
8								0	20			
9								0	20			
10								0	87			
11								0	153			
12	N	N	N	N	N	N	N	0	9.0	N	N	N
13	O	O	O	O	O	O	O	0	9.0	O	O	O
14								0	9.0			
15								0	9.0			
16								0	23			
17	F	F	F	F	F	F	F	7.0	40	F	F	F
18	L	L	L	L	L	L	L	16	42	L	L	L
19	O	O	O	O	O	O	O	16	42	O	O	O
20	W	W	W	W	W	W	W	16	41	W	W	W
21								18	13			
22								20	0			
23								20	0			
24								20	0			
25								20	0			
26								20	0			
27								20	0			
28								20	22			
29								20	22			
30		—						20	6			
31		—		—		—		20	—		—	
Mean	0	0	0	0	0	0	0	8.8	23.5	0	0	0
Ac-Ft	0	0	0	0	0	0	0	541	1400	0	0	0

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 1941 Water Year 1941

Kings River Water Association station located one mile southwest of Stretford. This station measures inflow of King River water to the Tulare Lake area. Period of record 1937 to date. Records for 1955 computed by Kings River Water Association.

TABLE 170

FLOW OF CROSS CREEK BELOW LAKELAND CANAL #2 - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13	N	N	N	N	N	N	N	N	N	N	N	0
14	O	O	O	O	O	O	O	O	O	O	O	0
15												0
16												0
17	F	F	F	F	F	F	F	F	F	F	F	0
18	L	L	L	L	L	L	L	L	L	L	L	0
19	O	O	O	O	O	O	O	O	O	O	O	0
20	W	W	W	W	W	W	W	W	W	W	W	0
21												0
22												0
23												0
24												700
25												2450
26												1200
27												75
28												0
29												0
30		—										0
31		—		—		—			—		—	0
Mean	0	0	0	0	0	0	0	0	0	0	0	143
Ac-Ft	0	0	0	0	0	0	0	0	0	0	0	8777

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 8777 Water Year 0

Corcoran Irrigation District station located below the Cross Creek weir, four miles east of Guernsey. Cross Creek is a tributary of Tulare Lake area. At times the flow is a combination of Kaweah River water, Kings River water and Cottonwood Creek water. Period of record 1921 to date. Records for 1955 computed by Corcoran Irrigation District.

TABLE 171

FLOW OF GOOSE LAKE CANAL NEAR LOST HILLS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13	N	N	N	N								
14	O	O	O	O								
15												
16												
17	F	F	F	F								
18	L	L	L	L								
19	O	O	O	O								
20	W	W	W	W								
21												
22												
23												
24												
25												
26												
27												
28												
29												
30		—										
31		—		—		—			—		—	
Mean												
Ac-Ft												

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year

Division of Water Resources and U. S. Bureau of Reclamation cooperative station located approximately one-half mile north of the Wasco-Lost Hills road and below the confluence of Goose Lake and main drainage canals. This station measures inflow of Kern River water to the Tulare Lake area. Period of record 1944 to date. Records for 1955 computed by Division of Water Resources. Station discontinued April 14, 1955.

TABLE 172

FLOW OF BUENA VISTA SLOUGH NEAR LOST HILLS - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1				0								
2				0								
3				0								
4				0								
5				0								
6				0								
7				0								
8				0								
9				0								
10				0								
11				0								
12				0								
13	N	N	N	0								
14	O	O	O	0								
15												
16												
17	F	F	F									
18	L	L	L									
19	O	O	O									
20	W	W	W									
21												
22												
23												
24												
25												
26												
27												
28												
29												
30		—										
31		—		—		—			—		—	
Mean	0	0	0	0								
Ac-Ft	0	0	0	0								

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year Water Year

Division of Water Resources and U. S. Bureau of Reclamation cooperative station, formerly listed as Westside Canal near Lost Hills and also known as Main Drain at Hart's Station, located at bridge on State Highway between Wasco and Lost Hills. This station measures inflow of Kern River water to the Tulare Lake area. Period of record 1944 to date. Records for 1955 computed by Division of Water Resources. Station discontinued April 14, 1955.

TABLE 173

DAILY ELEVATIONS OF TULARE LAKE IN KINGS COUNTY - 1955

Date	Daily Elevation in Feet (a)											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13				Lake dry during 1955 except for figures shown.								
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												*180.0
25												180.5
26												180.8
27												181.0
28												181.3
29												181.6
30		—										181.9
31		—		—		—			—		—	182.2

Station is maintained and operated by Tulare Lake Basin Water Storage District. Station is located approximately six miles southwest of Corcoran on the south end of El Rico Bridge. Records are available at this and other sites from 1937 to date.

(a) U. S. Geological Survey datum

* Water began entering lake 10:00 pm December 24, 1955.

TABLE 174

FLOW OF DELTA-MENDOTA CANAL AT TRACY PUMPING PLANT - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3372	2422	1721	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2423	1721	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1722	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2431	1722	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	—	[illegible]	—	[illegible]	—	[illegible]	[illegible]	—	[illegible]	—	[illegible]
Mean	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ac-Ft	[illegible]	[illegible]	[illegible]	131.47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year 1180048 Water Year 1130363

This flow is the diversion from Old River by the Tracy Pumping Plant and is the flow at the head of the Delta-Mendota Canal. Records for 1955 computed by the U. S. Bureau of Reclamation.

TABLE 175

FLOW OF CONTRA COSTA CANAL AT PUMPING PLANT NO. 1 - 1955

Date	Daily Mean Flow in Second-Feet											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32	28	32	49	78	93	98	105	106	64	51	42
2	33	33	32	62	56	87	92	99	106	66	52	40
3	33	28	32	59	46	80	91	103	109	74	57	41
4	44	31	32	64	45	96	91	110	110	88	59	41
5	40	31	32	63	56	118	92	111	105	67	61	39
6	36	32	30	66	53	112	96	105	103	62	62	40
7	32	32	32	71	57	119	104	106	100	65	62	53
8	32	32	34	73	59	121	117	108	104	71	62	46
9	31	34	35	75	60	123	111	107	105	65	65	44
10	29	35	32	75	61	118	111	103	103	68	65	42
11	30	29	33	77	66	114	106	104	100	61	64	44
12	27	31	33	77	68	106	103	106	102	64	65	41
13	30	33	32	77	66	100	109	109	104	64	59	42
14	29	31	33	81	68	98	115	110	104	59	55	45
15	27	60	32	97	65	101	110	105	101	55	52	46
16	25	55	35	96	60	111	116	103	92	53	52	45
17	24	56	34	90	70	119	112	102	90	52	49	45
18	23	64	33	83	69	116	105	104	84	53	45	45
19	23	32	38	79	69	105	99	108	88	54	49	45
20	27	35	37	73	71	104	106	105	87	53	48	42
21	28	58	37	73	73	105	105	97	93	54	48	43
22	32	32	37	77	74	110	101	88	90	58	48	36
23	31	48	42	77	84	113	100	90	87	54	42	35
24	26	65	44	76	92	109	102	86	84	51	43	37
25	31	37	53	76	85	106	103	84	85	54	43	35
26	33	31	54	78	89	104	103	104	100	52	42	26
27	32	34	58	78	83	103	105	98	97	51	42	30
28	32	32	49	76	81	97	112	98	102	50	44	34
29	32		59	78	89	101	110	95	102	53	44	35
30	33	—	63	78	85	100	105	92	99	54	44	41
31	31	—	51	—	100	—	105	96	—	51	—	35
Mean	30.7	34.5	39.0	75.1	70.9	106	105	101	98.1	59.4	52.5	40.5
Ac-Ft	1886	2140	2400	4464	4360	6325	6434	6230	5842	3650	3122	2489

Maximum Discharge		Total Runoff in Acre-Feet	Calendar Year	49342
			Water Year	47588

This flow is the diversion of Contra Costa Canal from Rock Slough. Records for 1955 computed by U. S. Bureau of Reclamation.

TABLE 176

RECORDING TIDE GAGES IN SACRAMENTO-SAN JOAQUIN DELTA AND SUISUN BAY

Name of Station	Operated by*	Location	Date Installed
		Sacramento Delta	
Clarksburg	DWR	Right bank of Sacramento River at American Crystal Sugar Company dock.	1936
Collinsville	DWR	Right bank of Sacramento River on pile dolphin about 0.1 mile upstream from junction of Main Street and river.	June 1929
Isleton	USBR	Left bank of Sacramento River at Shell Oil Company docks at junction of Highway 12 and 24 in Isleton.	April 1949
Rio Vista	DWR	Right bank of Sacramento River at U. S. Engineers depot below Rio Vista; about 1½ miles below Rio Vista Bridge.	April 1908
Snodgrass Slough	DWR	Left bank of Sacramento River about 0.1 mile above Hollister Landing and about ¼ mile above head of Snodgrass Slough (now leveed off).	Aug. 1939
Three Mile Slough (Sacramento)	DWR	Pile dolphin about 0.1 mile from Three Mile Slough Bridge on Brannon Island side.	April 1929
Walnut Grove	DWR	Left Bank of Sacramento River at head of Georgiana Slough; lower end of town of Walnut Grove.	Feb. 1929
		Mokelumne Delta	
Georgiana Slough	DWR	On Andrus Island near junction of Georgiana Slough and Mokelumne River.	June 1929
New Hope	DWR	Right bank of south fork of Mokelumne River just below New Hope Bridge.	Aug. 1920
		Yolo By-Pass	
Liberty Island	DWR	Right bank of dredger cut separating Little Holland and Liberty Island. One-half mile north of Yolo-Solano County line.	1930
Lindsay Slough	DWR	South bank of Lindsay Slough ½ mile west of Wright Cut. At Montezuma Ranch headquarters of California Packing Corporation.	Jan. 1942
Lisbon	DWR	Left bank of Yolo By-Pass below north end of Sacramento Northern Railroad trestle.	1920
		San Joaquin Delta	
Antioch	DWR	On wharf of Antioch Water Works.	June 1929
Brandte Bridge	DWR	Right bank of San Joaquin River at Brandte Bridge between Roberts Island and Reclamation District 17.	July 1940
Burns Cut-Off	USBR	On Stockton Ship Channel at East Bay Municipal Utility District crossing; northwest corner of Rough and Ready Island.	May 1940
Delta Cross Channel	USBR	Left bank approximately 1000 feet below head near Walnut Grove.	Sept. 1952
Grant Line Canal	USBR	Right bank of Grant Line Canal at Tracy Road crossing.	Oct. 1940
Middle River at Bacon Island	USBR	Most northeasterly point of Bacon Island at junction of Middle River and Connection Slough.	Oct. 1948
Middle River (Borden)	DWR	Left bank of Middle River just below Borden Highway Bridge on Victoria Island.	July 1939
Middle River (Mowry Bridge)	USBR	Right bank Middle River at Undine Road crossing on upper Roberts Island.	July 1948
Mossdale Bridge	DWR	Right bank of San Joaquin River just below U. S. 40 highway crossing.	1920
Old River at Clifton Court Ferry	DWR	Left bank approximately 2000 feet downstream from junction with Grant Line Canal.	Dec. 1948
Old River at Holland Tract	USBR	Left bank about 1½ miles south of northeast corner of Holland Tract.	Sept. 1951
Old River at Mansion House	DWR	Right bank on timber dolphin at Mansion House on Victoria Island.	Aug. 1939
Old River near Rock Slough	DWR	Left bank of Old River 1½ miles north of junction with Rock Slough on American Island.	Mar. 1945
Old River near Tracy Road Bridge	DWR	Left bank at Gallis Pump, Mile 53.0. About 1000 feet upstream from Tracy Road Bridge.	Mar. 1952
Rindge	DWR	At southeast corner of Rindge Tract on Fourteen Mile Slough at junction with Ship Channel.	July 1939
Rock Slough	USBR	On Contra-Costa Canal intake approximately 1½ miles northeast of Knightsen. (No record: February to December 1946).	Oct. 1944
San Andreas Landing	USBR	On right bank of San Joaquin River approximately 1½ miles downstream from junction of Mokelumne River.	May 1952
Stockton	DWR	At head of McLeod Lake on Center Street.	Dec. 1927
Tom Paine Slough	DWR	At mile 2.2 above mouth (0.1 mile east of mouth of Sugar Cut).	June 1951
Three Mile Slough (San Joaquin)	DWR	On Sherman Island at Reclamation District 341 drainage plant on pile dolphin. Near junction of Slough with San Joaquin River.	June 1929
Venice Island	DWR	At Blakes Landing on Stockton Ship Channel near Venice Island headquarters.	Jan. 1928
		Suisun Bay	
Benicia	DWR	North side of Suisun Bay. On Benicia Arsenal wharf.	δApril 1940

* DWR - Division of Water Resources; USBR - United States Bureau of Reclamation.

δ Gage originally installed June 1929 and operated until October 1931 by Division of Water Resources. In interim 1931 to April 1940 recorders were operated here at intervals by U. S. Engineers and U. S. Coast and Geodetic Survey.

TABLE 177

SUMMARY OF WATER UTILIZATION OF SACRAMENTO-SAN JOAQUIN VALLEYS

	Year	Acreage			Diversion Acre-Feet	Irrigation Draft Average c.f.s. July	Gross Duty of Water		Runoff in % of Normal
		General	Rice	Total			Ac. Ft. per Acre	Acres per Sec. Ft.	Sacto. R. at Red Bluff
							(a)	(a)	
	1946	117600	124100	241700	1778000	5560	7.2	67	100
	1947	121600	124000	245600	1707000	5600	6.8	71	63
Sacramento River	1948	149700	124100	273800	1593000	5947	5.7	85	95
	1949	143500	137300	280800	1873000	6344	6.6	74	75
Redding	1950	152800	108500	261300	1794000	5944	6.7	72	71
	1951	162200	140800	303000	1975000	6653	6.4	76	113
to	1952	142900	139100	282000	1805000	5987	6.3	77	143
	1953	134900	164600	299500	2018000	6829	6.6	73	120
Sacramento	1954	139800	184900	324700	2091000	7301	6.3	77	115
	1955	165700	136400	302100	2096000	6796	6.8	71	70
	Av. 1946 to 1955	143100	138400	281500	1873000	6296	6.5	74	96
									Sacto. R. at Red Bluff
							(b)	(b)	
	1946	3030	3690	6720	71200	256	10.6	46	100
	1947	1040	6570	7610	80500	281	10.6	46	63
	1948	3250	4740	7990	67500	275	8.4	58	95
Colusa Trough	1949	3140	5560	8700	90200	310	10.4	47	75
	1950	4930	5150	10080	108100	353	10.7	45	71
above	1951	4050	6640	10690	130200	417	12.2	40	113
	1952	5140	7280	12420	162300	519	13.1	37	143
Highway 20 Bridge	1953	3520	11010	14530	175000	618	12.0	40	120
	1954	2810	11790	14600	198800	706	13.6	36	115
	1955	4940	6970	11910	156600	509	13.1	37	70
	Av. 1946 to 1955	3580	6940	10520	124000	424	11.8	41	96
									Sacto. R. at Red Bluff
	1946	2060	7880	9940	70900	256	7.1	68	100
Back Borrow Pit	1947	2300	9040	11340	73900	254	6.5	75	63
	1948	2460	7080	9540	59100	257	6.2	78	95
Knights Landing	1949	1270	9000	10270	69500	230	6.8	72	75
	1950	3230	5920	9150	64400	203	7.0	69	71
Outfall Gates	1951	2860	6970	9830	73500	241	7.5	65	113
	1952	2700	5900	8600	73000	295	8.5	57	143
to	1953	3070	6400	9470	79100	284	8.4	58	120
	1954	2470	5200	7670	71600	296	9.3	52	115
Highway 20 Bridge	1955	3730	4000	7730	68300	261	8.8	55	70
	Av. 1946 to 1955	2610	6740	9350	70300	258	7.5	65	96
									Sacto. R. at Red Bluff
	1946	1790	3000	4790	30300	112	6.3	77	100
	1947	3220	2980	6200	27200	110	4.4	111	63
Yolo By-Pass	1948	1710	2260	3970	27800	93	7.0	69	95
	1949	1740	2150	3890	34600	83	8.9	55	75
and	1950	1650	1920	3570	29300	84	8.2	59	71
	1951	3650	3360	7010	40700	141	5.8	84	113
Knights Landing	1952	3770	540	4310	12200	40	2.8	172	143
	1953	2510	2240	4750	23500	80	4.9	98	120
Ridge Cut	1954	3960	2850	6810	44900	192	6.6	74	115
	1955	5110	3090	8200	41400	161	5.0	96	70
	Av. 1946 to 1955	2910	2440	5350	31200	110	5.8	83	96
									Feather R. near Oroville
	1946	8250	1850	10100	45600	123	4.5	108	94
	1947	4520	1120	5640	19800	58	3.5	138	57
	1948	4650	660	5310	27600	106	5.2	93	87
Lower Butte Creek	1949	7140	1880	9020	65200	205	7.2	67	59
	1950	7200	1540	8740	50500	187	5.8	84	87
and	1951	6980	1700	8680	53400	206	6.2	79	128
	1952	8660	2850	11510	52400	181	4.6	107	179
Butte Slough	1953	6940	2560	9500	49400	218	5.2	93	117
	1954	8170	3880	12050	63800	247	5.3	92	95
	1955	8370	3180	11550	54800	226	4.7	102	56
	Av. 1946 to 1955	7090	2120	9210	48200	176	5.2	93	96

(a) Excluding municipal diversions, the City of Sacramento, and the City of Redding.
(b) Includes an undetermined amount of water used by cooperative plants and is not indicative of use.

TABLE 177

SUMMARY OF WATER UTILIZATION OF SACRAMENTO-SAN JOAQUIN VALLEYS (contd.)

	Year	Acreage			Diversion Acre-Feet	Irrigation Draft Average c.f.s. July	Gross Duty of Water		Runoff in % of Normal
		General	Rice	Total			Ac. Ft. per Acre	Acres per Sec. Ft.	Feather R. near Oroville
East and West Borrow Pits of Sutter By-Pass and Sacramento Slough	1946	9380	4920	14300	59200	217	4.1	117	94
	1947	8840	3210	12050	48400	180	4.0	121	57
	1948	7920	2640	10560	36200	149	3.4	142	87
	1949	8300	6180	14480	77600	252	5.4	91	59
	1950	11650	4480	16130	89100	329	5.5	88	87
	1951	11120	6110	17230	103200	405	6.0	81	128
	1952	10060	5580	15640	78400	284	5.0	97	179
	1953	11080	7450	18530	109700	440	5.9	82	117
	1954	11420	7990	19410	125300	477	6.5	75	95
	1955	11580	6180	17760	108000	393	6.1	80	56
	Av. 1946 to 1955	10140	5470	15610	83500	313	5.3	91	96
									Feather R. near Oroville
Feather River Mouth to Oroville Bridge	1946	27200	51100	78300	745000	2362	9.5	51	94
	1947	28300	49700	78000	674000	2245	8.6	56	57
	1948	29500	43300	72800	586000	2292	8.0	60	87
	1949	31000	51100	82100	716000	2241	8.7	56	59
	1950	34000	41300	75300	662000	2229	8.8	55	87
	1951	31200	56500	87700	727000	2319	8.3	59	128
	1952	30300	57900	88200	727000	2438	8.2	59	179
	1953	29100	64100	93200	792000	2640	8.5	57	117
	1954	28900	64800	93700	757000	2612	8.1	60	95
	1955	34400	47700	82100	733000	2178	8.9	54	56
	Av. 1946 to 1955	30400	52700	83100	712000	2356	8.6	57	96
									Yuba R. at Smartville
Yuba River Mouth to Smartville	1946	8870	1960	10830	98700	278	9.1	53	103
	1947	8280	3630	11910	100100	282	8.4	58	59
	1948	8720	3120	11840	92800	281	7.8	62	87
	1949	8840	3300	12140	106800	316	8.8	55	64
	1950	10000	2640	12640	127400	342	10.1	48	96
	1951	9640	3420	13060	110300	313	8.4	58	153
	1952	9800	3600	13400	131800	362	9.8	49	178
	1953	9120	5300	14420	133100	362	9.2	53	110
	1954	8640	6080	14720	140600	448	9.6	51	83
	1955	9100	4690	13790	143100	512	10.4	47	55
	Av. 1946 to 1955	9100	3770	12870	118500	350	9.2	53	99
									American R. at Fair Oaks
American River Mouth to Fair Oaks	1946	2890		2890	4120	18	1.8 (a)	275 (a)	106
	1947	3670		3670	5910	19	1.7	291	52
	1948	3630		3630	5880	28	1.9	255	83
	1949	3860		3860	5510	24	2.6	186	68
	1950	4000		4000	4600	18	2.5	192	98
	1951	4830		4830	5450	21	2.0	249	171
	1952	4560		4560	3950	17	1.7	293	183
	1953	4570		4570	4860	23	1.6	297	98
	1954	4630		4630	7250	32	1.3	368	74
	1955	4440		4440	4710	21	1.1	440	58
	Av. 1946 to 1955	4110		4110	5220	22	1.8	271	99
									Sacto. R. at Sacramento
Sacramento River System Sacramento River and Tributaries	1946	181100	198500	379600	2903000	9182	7.6 (b)	64 (b)	100
	1947	181800	200200	382000	2737000	9029	7.1	68	59
	1948	211500	187900	399400	2496000	9428	6.2	78	90
	1949	208800	216500	425300	3038000	10005	7.1	68	68
	1950	229500	171400	400900	2929000	9689	7.3	67	82
	1951	236500	225500	462000	3219000	10716	6.9	70	131
	1952	217900	222700	440600	3046000	10123	6.9	71	163
	1953	204800	263700	468500	3385000	11494	7.2	67	115
	1954	210800	287500	498300	3500000	12311	7.0	69	100
	1955	247400	212200	459600	3406000	11057	7.4	66	63
	Av. 1946 to 1955	213000	218600	431600	3066000	10303	7.1	69	97

(a) Excludes diversion and acreage of Carmichael Irrigation District.
(b) Excluded municipal and Carmichael Irrigation District diversions and acreage of Carmichael Irrigation District.

TABLE 177

SUMMARY OF WATER UTILIZATION OF SACRAMENTO-SAN JOAQUIN VALLEYS (contd.)

	Year	Acreage			Diversion Acre-Feet	Irrigation Draft Average c.f.s. July	Gross Duty of Water		Runoff in % of Normal
		General	Rice	Total			Ac. Ft. per Acre	Acres per Sec. Ft.	San Joaquin R. near Vernalis
Old San Joaquin River Delta Uplands (a)	1946	34260		34260	94100	276	2.7	177	100
	1947	37860		37860	98600	313	2.6	187	59
	1948	40300		40300	98100	315	2.4	200	73
	1949	42190		42190	108300	332	2.6	189	66
	1950	40230		40230	116300	362	2.9	168	81
	1951	40110		40110	105200	344	2.6	185	126
	1952	39150		39150	94800	334	2.4	201	167
	1953	41260		41260	118800	355	2.9	169	75
	1954	40740		40740	131200	393	3.2	151	74
	1955	41520		41520	130600	405	3.1	154	61
	Av. 1946 to 1955	39760		39760	109600	343	2.8	176	88
									San Joaquin R. near Vernalis
Tom Paine Slough Delta Uplands	1946	5730	320	6050	19700	54	3.3	149	100
	1947	5280	550	5830	20000	61	3.4	142	59
	1948	5080	470	5550	20200	70	3.6	134	73
	1949	5210	380	5590	23300	70	4.2	117	66
	1950	5220	360	5580	20400	63	3.7	133	81
	1951	4750	410	5160	22600	71	4.4	111	126
	1952	5210		5210	18800	68	3.6	135	167
	1953	5390		5390	21500	65	4.0	123	75
	1954	5470		5470	22800	73	4.2	117	74
	1955	5520		5520	23000	66	4.2	117	61
	Av. 1946 to 1955	5290	250	5540	21200	66	3.8	127	88
									San Joaquin R. near Vernalis
San Joaquin River Stockton to Vernalis Delta Uplands	1946	24500		24500	77200	250	3.2	154	100
	1947	25120		25120	84500	251	3.4	144	59
	1948	25550		25550	66600	226	2.6	186	73
	1949	26950		26950	78600	243	2.9	167	66
	1950	26600		26600	84600	277	3.2	153	81
	1951	26610		26610	74900	242	2.8	173	126
	1952	24750		24750	58700	199	2.4	205	167
	1953	27270		27270	85800	295	3.1	154	75
	1954	27360		27360	87500	299	3.2	152	74
	1955	27630		27630	94100	301	3.4	143	61
	Av. 1946 to 1955	26230		26230	79200	258	3.0	161	88
									San Joaquin R. near Vernalis
San Joaquin River Vernalis to Fremont Ford Bridge	1946	43090	1400	44490	160000	520	3.6	135	100
	1947	43080	1360	44440	181400	554	4.1	119	59
	1948	46380	540	46920	144800	471	3.1	157	73
	1949	45780	620	46400	166900	551	3.6	135	66
	1950	48110	390	48500	175100	537	3.6	135	81
	1951	48740	730	49470	172700	571	3.5	139	126
	1952	47400	620	48020	147300	508	3.1	158	167
	1953	51640	1500	53140	205900	673	3.9	125	75
	1954	49990	2480	52470	200900	618	3.8	127	74
	1955	50840	720	51560	193200	595	3.7	130	61
	Av. 1946 to 1955	47500	1040	48540	174800	560	3.6	135	88
									Merced R. at Exchequer
Merced River Mouth to below Snelling (b)	1946	4480		4480	14400	59	3.2	151	96
	1947	5910		5910	21100	71	3.6	136	58
	1948	6490		6490	17800	80	2.7	177	70
	1949	7940		7940	25600	92	3.2	151	65
	1950	7910		7910	23900	78	3.0	161	73
	1951	8090		8090	22200	78	2.7	177	124
	1952	7460		7460	18100	64	2.4	200	160
	1953	7430		7430	29700	103	4.0	122	63
	1954	8390		8390	29300	113	3.5	139	68
	1955	8580		8580	30300	99	3.5	138	54
	Av. 1946 to 1955	7270		7270	23200	84	3.2	152	83

(a) Excluding diversions and acreage irrigated by Delta-Mendota and Contra Costa Canals.
(b) Excluding diversion and acreage of Merced Irrigation District.

TABLE 177

SUMMARY OF WATER UTILIZATION OF SACRAMENTO-SAN JOAQUIN VALLEYS (contd.)

	Year	Acreage			Diversion Acre-Feet	Irrigation Draft Average c.f.s. July	Gross Duty of Water		Runoff in % of Normal
		General	Rice	Total			Ac. Ft. per Acre	Acres per Sec. Ft.	Tuolumne R. near La Grange
Tuolumne River	1946	3560		3560	4920	15	1.4	352	102
	1947	3760		3760	7470	20	2.0	245	59
Mouth	1948	3740		3740	6230	21	1.7	292	76
	1949	4410		4410	6440	18	1.5	333	68
to	1950	4690		4690	6100	18	1.3	374	84
	1951	4500		4500	4620	14	1.0	473	134
La Grange Dam	1952	4790		4790	5080	18	1.1	458	165
	1953	5280	120	5400	11350	34	2.1	231	83
(a)	1954	5760	140	5900	14610	50	2.5	196	78
	1955	6290		6290	14430	45	2.3	212	61
	Av. 1946 to 1955	4680	20	4700	8120	25	1.7	281	91
									Stanislaus R. below Melones
Stanislaus River	1946	6340		6340	26800	82	4.2	115	102
	1947	6600		6600	30100	88	4.6	107	55
Mouth	1948	7920		7920	29700	99	3.8	130	77
	1949	8550		8550	34000	106	4.0	122	64
to	1950	8440		8440	33400	102	4.0	123	93
	1951	8340		8340	34700	99	4.2	117	146
Goodwin Dam	1952	7770		7770	30200	91	3.9	125	165
	1953	8900		8900	42500	136	4.8	102	83
(b)	1954	9290		9290	44100	129	4.7	102	77
	1955	10040		10040	46100	134	4.6	106	59
	Av. 1946 to 1955	8220		8220	35200	107	4.3	113	92
									San Joaquin R. near Vernalis
	1946	122000	1700	123700	397000	1256	3.2	151	100
	1947	127600	1900	129500	443000	1358	3.4	142	59
San Joaquin River System	1948	135500	1000	136500	383000	1282	2.8	173	73
	1949	141000	1000	142000	443000	1412	3.1	156	66
San Joaquin River	1950	141200	800	142000	460000	1437	3.2	150	81
	1951	141100	1200	142300	437000	1419	3.1	158	126
Stockton-Fremont Ford	1952	136500	600	137100	373000	1282	2.7	179	167
	1953	147200	1600	148800	515000	1661	3.5	140	75
Bridge and Tributaries	1954	147000	2600	149600	530000	1675	3.5	137	74
	1955	150400	700	151100	532000	1645	3.5	138	61
	Av. 1946 to 1955	139000	1300	140300	451000	1443	3.2	151	88
									Sacramento and San Joaquin Rivers to Delta
Combined above Delta									
Sacramento River							(c)	(c)	
	1946	303100	200200	503300	3300000	10438	6.5	75	100
and Tributaries	1947	309400	202100	511500	3180000	10387	6.2	79	59
	1948	347000	188900	535900	2879000	10710	5.3	91	86
and	1949	349800	217500	567300	3481000	11417	6.1	80	68
	1950	370700	172200	542900	3389000	11126	6.2	78	83
San Joaquin River	1951	377600	226700	604300	3656000	12135	6.0	81	131
	1952	354400	223300	577700	3419000	11405	5.9	82	164
Stockton-Fremont Ford	1953	352000	265300	617300	3900000	13155	6.3	77	104
	1954	357800	290100	647900	4030000	13986	6.2	78	92
Bridge and tributaries	1955	397800	212900	610700	3938000	12702	6.4	76	62
	Av. 1946 to 1955	352000	219900	571900	3517000	11746	6.1	79	95

(a) Excluding diversion and acreage of Modesto, Turlock, and Waterford Irrigation Districts.
(b) Excluding diversion and acreage of South San Joaquin and Oakdale Irrigation Districts.
(c) Excluding municipal and Carmichael Irrigation District diversions and acreage of Carmichael Irrigation District.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Nice
--"M" STREET BRIDGE - SACRAMENTO--	0.0												
--GAGING STATION - SACRAMENTO RIVER AT SACRAMENTO--	0.43L												
City of Sacramento	0.8L	3-18" 2-20" 2-24"	2663	2789	3625	4598	4980	5087	4002	3074	a 30818	Municipal	
--AMERICAN RIVER--	1.1L												
--BACK BORROW PIT RECLAMATION DISTRICT 1000--	1.3L												
Fourness Estate b	1.45R	1-8"		22	50	125	208	158	48		611	157	
--RECLAMATION DISTRICT 1000 DRAIN--	2.1L												
Elmer F. Christophel	2.15L	1-8"	32	16	18	44	43	12	23		188	35	
D. D. Parr	3.15L	1-6"				14	9				23	20	
Rose Orchard	3.55R	1-16"			102	396	369	128	187		1182	170	
Evergreen Farms	3.75R	1-6"				NO DIVERSION							
M. Owyang	4.0R	1-10"		21							21	35	
--SACRAMENTO WEIR RECORDER STATION--	4.2												
Reese and Greer	4.65R	1-7"				22	23				45	58	
George W. Reed	5.05R	1-12"		90	36	39	85	107	60		417	90	
Mary S. Seydel Estate	5.25R	1-8"	11	27	22	69	93	14	2		238	57	
A. R. Markley	5.3R	1-6"			1	20	6	12			39	30	
Lucy Casselman	5.5R	1-6"				19	21				40	30	
A. A. Casselman	5.55R	1-8"		18	30	31	31	5			115	68	
J. E. Handy	6.0R	1-6"				NO DIVERSION							
Riverside Mutual Water Company	6.1L	2-18"	22	729	675	1629	1596	1728	513	83	6975	1758	115
W. W. White	6.6R	1-6"				NO DIVERSION							
--RECLAMATION DISTRICT 1000 DRAIN #3--	6.85L												
Fred C. Jones	7.5L	1-8"				12	58	50	15		135	97	
A. Marty and C. Inderkum	7.7R	1-8"		36		76	120	148	48		428	c,d 233	
M. R. Williamson	7.8L	1-10"				38	26	47	1		112	86	
E. D. Willey	7.9L	1-10"		17		77	73	74	34		275	135	
A. Marty and C. Inderkum	8.25R	1-8"					17	59	10		86	c	
A. Marty and C. Inderkum	8.3R	1-8"		2	47	53	58	50	48		d 258	120	
Pearl Blauth	8.5R	1-7"			2	25	18	5			50	40	
H. Waldeck	8.7R	1-6"				NO DIVERSION							
Pong Shee Farm	9.3L	1-10"		20	72	201	282	209	89		873	232	
Henry Amen and E. C. Peabody	9.35R	1-14"		83	147	367	279	300	159		1335	e 408	
Fred C. Jones	9.8L	1-8"		16	7	27	30	29	18	1	128	29	
Carl Casselman	9.9R	1-12"		5		74	114	207			400	130	
Lloyd M. Robbins	10.25L	1-14"		9	31	66	89	82	30		307	292	
Leona Hughes	10.65R	1-12"			32	60	82	115	69		358	195	
Edward Russell	10.75L	1-12"	3	6	27	69	82	16			203	120	
W. A. Ten Eyck	11.1R	1-12"		170	162	320	281	268	198		1399	310	
--ELKHORN FERRY--	11.9												
Woodland Farms, Incorporated	12.0R	4-36"		3438	9446	11590	13873	13992	4325	605	f,g 57269	h 4531	h,i 5475
Thomas O'Connor Estate	12.5R	1-12"		4	444	266	350	268	215		1547		g 78
William Plumb Jr.	12.7R	1-6"				100	37				137	71	
Lewis Thornton	12.95R	1-5"				2	4	3			9	4	
S. C. Farms, Incorporated	13.1R	1-12"	23	105	56	201	323	221	218	50	j 1197	k 235	
S. C. Farms, Incorporated	13.25R	1-12"	75	35	92	29	14	16	65	53	m 379	k	
Elkhorn Mutual Water Company	14.1L	1-24" 1-30"	44	984	1341	3125	3059	3013	1252	163	12981	a,b 2673	a 40

a Additional acre-feet diverted: January 2,125, February 2,004, November 2,328, and December 2,177.
b Previously listed as E. Fourness.
c Combined acreage for Miles 7.7R and 8.25R.
d The acreage listed for Mile 7.7R also received an undetermined amount of water from Mile 8.3R.
e Includes 218 acres Amen lands and 190 acres of Peabody lands.
f Additional acre-feet diverted: January 443, November 1,283, and December 2,858
g The acreage listed for Mile 12.5R also received 135 acre-feet of water from Mile 12.0R.
h This acreage also received 738 acre-feet of water from Willow Slough, 2,790 acre-feet of water from Cache Creek, and an undetermined amount of water from controlled drainage.
i Of this acreage, 660 was reused as Duck Club land. Includes 1,073 acres outside of Woodland Farms, Incorporated.
j Additional acre-feet diverted: November 19.
k Combined acreage for Miles 13.1R and 13.25R. This acreage was double cropped.
m Additional acre-feet diverted: November 36.
n Forty acres of rice and 360 acres of general crops listed for Mile 14.1L were wholly irrigated by 2,345 acre-feet of water from Mile 16.0L.
p Twenty nine acres of general crops listed for Mile 14.1L were partially irrigated by 51 acre-feet of water from Mile 16.0L.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Joseph Veresa	14.2SR	1-14"		42	240	304	367	367	273	64	a 1707	160	70
A. Bianchi	15.1L	b 1-3" 1-4"				2	3	1			6	3	
Donald J. Damron (c)	15.1R	1-10"		124	64	72	127	54			441	240	
Natomas Central Mutual Water Company	15.0L	1-24" 2-32" 2-38"		2669	9040	7466	729	5695	3604	82	d,e 42272	2573	5852
Hershey Estate	15.27R	1-20"		1			62				63	85	
Sacramento River Ranch	17.2SR	1-14"				168	88	160	24		440	f 210	
Sacramento River Ranch	17.0R	1-14"				40		19			59	f	
Frank and Ruth Lang	17.4R	1-16"				202		169			371	110	
Jose Alves and Sons	17.75R	1-10"			18		38		39		95	g	1
Jose Alves and Sons	18.0R	1-20"		91	698	843	1050	1115	714		4511	g 500	1 180
M. C. Lauppe	18.2L	2-10"		52	30	137	258	140	44		661	246	
Burton H. Lauppe	18.45L	1-14"			20	90	64	70	14		258	140	
Layton Knegge	18.7R	1-24"		1767	1848	1898	2044	2046	1032		10035		426
J. L. Brannely	18.7L	1-12"		42	209	230	186	231	126		1024	40	100
SACRAMENTO TO VERONA Totals			2873	13480	28619	35236	39749	34470	19499	4175	183121	16756	12336
Average cubic feet per second			47	227	465	592	646	642	328	68	377		
Monthly use in per cent of seasonal			1.6	7.4	15.6	19.2	21.7	21.6	10.6	2.3			
--GAGING STATION - SACRAMENTO RIVER AT VERONA--	19.6L												
--CROSS CANAL RECLAMATION DISTRICTS 1000 and 1001--	19.6L												
Arthur Drown	*(0.0SS)	h 1-10"			62	69	70	124	95		i 420	135	
Natomas Central Mutual Water Company	*(1.0S)	1-28" 1-36"		1190	2477	1952	2538	2514	1016	13	11700	117	915
Natomas Central Mutual Water Company	*(2.0S)	1-20" 2-24"		1501	5187	3603	4642	4424	2432		21789	2236	2486
B. J. Ukropina	*(3.3N)	2-24"		60	1046	424	1298	1311	1083		5224	j 120	j,k 800
B. J. Ukropina	*(3.35N)	1-16"		384	240	631	773	801	353		3182	j	j
Roy C. Osterli	*(3.35N)	1-14"				75	77	413	88		653	m	m
Roy C. Osterli, Nerlan Van Dyke, and Orlan Van Dyke (n)	*(3.45N)	1-36"		35	2187	1990	1979	1994	1261	52	k 9498	m 595	m 685
--FEATHER RIVER--	20.9L												
--SACRAMENTO SLOUGH--	21.2L												
Sacramento River Ranch	21.5R	1-16"	4	47	846	795	823	804	399		3718	55	280
Sacramento River Ranch	21.7R	1-15"				117	82	78	2		279	115	
Sacramento River Ranch	22.5R	1-24"				NO DIVERSION							
A. P. Johnston	26.8L	1-16"				49	78				127	200	
Anthony Furlan	26.6L	1-16"					18				18	60	
--FREMONT WEIR RECORDER STATION--	28.0R												
Anthony Furlan	28.2L	1-12"				26	64	40			130	75	
Gus Inglin	28.2R	1-6"		10	7	23	23	22	12		97	29	
Ralph White	28.4L	1-8"				14	36	59	10		119	48	
Hershey Estate	29.0R	1-12" 2-16"				344	659			2	1005	150	
Russell Brothers	29.2R	1-12"				15	94	41	8		158	100	
Sebastian Yturralde	29.9L	1-12"		9		32	39	63			143	105	
M. R. Richardson	30.1R	1-8"				NO DIVERSION							
Leo Giovanetti	30.2L	1-6"				11	13	17			41	40	
Anthony Furlan	30.4L	1-14"		15	190	115	157	139			616	79	p 100
M. N. Richardson	30.7R	1-10"		103	273	219	244	238	92		1169		q 70
Albert Nusz	30.7SR	1-6"		13	5		19	13	4		54	20	

s Mile 19.6L Cross Canal. Distance from Sacramento River and bank are shown in ().
a Additional acre-feet diverted: November 2 and December 4.
b The 3" unit was a temporary installation during 1955.
c Formerly listed as William H. Mitchel.
d Forty acres of rice and 360 acres of general crops listed for Mile 14.1L were wholly irrigated by 2,345 acre-feet of water from Mile 10.0L.
e Twenty nine acres of general crops listed for Mile 14.1L were partially irrigated by 51 acre-feet of water from Mile 10.0L.
f Combined acreage for Miles 16.2R and 17.2R.
g Combined acreage for Miles 17.75R and 18.0R. Of the general acreage, 125 was double cropped.
h Reila on a 20" unit.
i Additional acre-feet diverted: November 1.
j Combined acreage for Ukropina plants at Mile (3.3N) and (3.35N).
k The rice acreage listed for Mile (3.3N) also received an undetermined amount of water from Mile (3.45N).
m Combined acreage for Osterli Plant at Mile (3.35N) and plant at Mile (3.45N).
n New installation in 1955.
p The acreage also received an undetermined amount of water from controlled drainage.
q The acreage listed for Mile 30.7R also received an undetermined amount of water from Mile 31.7SR.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Alice E. West	30.9L	1-6"					17				17	30	
A. C. Huston, Jr. and Mrs. E. Huston	31.5R	1-12"				46	42				88	70	
M. R. Richardson	31.75R	1-14" 1-20"		125	7	215	338				a 685	293	
M. Alonso	31.8L	1-6"					4				4	30	
Sutter Mutual Water Company (Portuguese Bend)	32.0L	1-20" 2-24"	85	376	2378	2621	2722	2498	1454	161	b 12295	1451	581
Collier Brothers	32.5R	1-10"		2	6	34	60	29	13	5	c 149	79	
J. F. Waters and E. Furlan	32.5L	1-12"		21	49	61	53	50			234	74	
W. R. Zeigler and H. Carlson	33.2L	2-10" 1-12"		1	627	395	586	510	278		2397	458	160
J. G. Knox	33.35L	1-10" 1-12"					60	55			115	160	
Clarence Du Bois	33.5R	1-12"	49	58	18	80	99	67	7		378	120	
P. K., G. J., and W. N. Leiser and L. J. Mansager	33.75L	1-14"		1	162	2	204	59	20	1	449	335	
Nail Wilson	33.85R	1-6"	9	2	11	21	19	28	18	13	c 121	32	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	33.95												
VERONA TO KNIGHTS LANDING Totals Average cubic feet per second Monthly use in per cent of seasonal			147 2 0.2	3953 66 5.1	15780 257 20.5	13979 235 18.1	17930 292 23.3	16391 267 21.3	8645 145 11.2	247 4 0.3	77072 159	7471	6077
--GAGING STATION - SACRAMENTO RIVER AT KNIGHTS LANDING--	34.0L												
--KNIGHTS LANDING BRIDGE--	34.1												
--COLUSA BASIN DRAIN--	34.15R												
E. E. Nuttall (d)	34.15R (0.2)	1-6"				1					e 1		
River Farms Company	34.5R	1-16" 1-20" 1-24"		3449	3635	3807	4376	4057	1091		20415	f 208	f,g 1531
Wallace Ernst and A. Johnson	34.85L	1-8" 1-12"				58	121				179	100	
Walter Raymond	35.2L	1-12"			71	112	121	11			315	160	
Knox and Anderson	35.8L	1-10"				1	48	24			73	68	
J. Goffitzar	35.85L	1-6"				13					13	10	
Frank Rossi	36.2L	1-12" 1-14"		37	377	375	361	351	206		1707	43	155
Earl H. Oray	36.45L	1-8"				NO DIVERSION							
--RECLAMATION DISTRICT 787 DRAINAGE PLANT--	37.0R												
Albert Nuttall	37.2L	1-14"				118	122	105			345	90	
Maybelle J. Bundock	37.75L	1-8"				2	83	16			101	128	
Alice Raal and Mabel Green	38.4L	1-10"					19	10	10		39	48	
C. L. Reel	38.8L	1-10"				NO DIVERSION							
C. L. Reel (h)	39.4L	1-12"					124	18	47		189	100	
C. L. Reel	39.8L	1-10"				107	28	13			148	50	
William Duffy, Jr.	39.9L	1-5" 1-6"					13	12			25	25	
Sutter Mutual Water Company (State Ranch Bend)	40.6L	2-24" 1-36"	32	1423	5701	4567	5380	5338	2129		24570	2885	1952
River Farms Company	41.0R	1-14" 1-16"		134	316	369	142	184			1145	482	
Buell Ranch	41.0L	1-6"				12	3	4			19	23	
Buell Ranch (B. E. Dean)	42.2L	1-6"				NO DIVERSION							
Mrs. N. Loranzetti	42.3L	1-8"				NO DIVERSION							
El Dorado Ranch	42.3R	a 1-14" 1-16"			164	442	475	185	66		b 1332	687	
El Dorado Ranch	43.1R	1-12"				NO DIVERSION							

a The acreage listed for Mile 30.7R also received an undetermined amount of water from Mile 31.75R.
b Additional acre-feet diverted: November 69.
c Additional acre-feet diverted: November 3.
d This plant formerly listed on Back Borrow Pit at Mile 0.2R.
e Diversion for stock water.
f Combined acreage for Mile 34.5R and plant on Back Borrow Pit at Mile 0.3L.
g Of this acreage, 287 also received an undetermined amount of water from Mile 43.1R for flooding only.
h Formerly listed as Ivan Shuey.
i A 10" unit was removed in 1955.
j Additional acre-feet diverted: November 4.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct.	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Acre-Feet	General	Rice
Reclamation District 2047	43.1R	3-50"		6902	11751	11187	11443	12062	4292		a 57637	b 2856	b 5255
Kramer Ranch	43.1L	1-12"			56	40	50	11			157	108	
Bill Erdman	43.4R	1-10"			30	99	130	125			390	146	
--RECLAMATION DISTRICT 108 DRAINAGE PLANT--	44.0R												
John Clauss	44.2L	1-18"		5	393	617	716	909	841		c 3481	435	
John Clauss (Puchlin)	45.6L	1-14"				NO DIVERSION							
--GAGING STATION - SACRAMENTO RIVER ABOVE R.D. 108 DRAINAGE PLANT--	46.4												
John Clauss	46.45L	1-16"		73	881	980	1027	998	908		4867	32	c 190
J. H. Henle (d)	46.5L	1-14" 1-20"		138	424	127	275	90	64		e 1118	265	
P. J. Hiatt	48.7L	2-22"		44	2085	2074	2110	2128	1184		9625	550	170
G. J. Hiatt	49.7L	1-14"		25	184	270	167	245	82		973	193	71
Reclamation District 108 (Tyndall Mound)	51.1R	2-24" 1-36"		7240	6032	6064	7379	6522	1057		34294	682	2315
Holmes and Westover Company	51.2L	2-16"			1365	1179	1184	1105	500		5333	555	360
Fritz Erdman	51.9R	1-12"				90	95	41			226	100	
Thomas Nelson	52.0L	1-16"		8		168	174	95	24		469	f 235	
George Van Ruiten	52.9L	1-10"				NO DIVERSION							
River Farms Company	53.8R	1-12" 1-15"	178	35	236	379	571	396	225	110	g 2130	296	
George Van Ruiten	53.9L	1-12"				52	228	239	67		586	300	
Broomieside Farms	55.1L	1-20"			13	70	71	103			257	200	
Broomieside Farms	56.3L	1-16"				53	214	84			351	135	
Reclamation District 108 (Boyer Bend)	56.4R	1-12" 1-18" 2-22"	194	339	1049	755	2086	1625	589		6637	2187	
Jacob Miller	56.65R	1-12"				NO DIVERSION							
Broomieside Farms	56.95L	1-20"				125	295	183			603	590	
L. M. Miller	57.0R	1-10"				NO DIVERSION							
William Crawford (h)	57.25L	1-24" 1-30"			972	1280	1312	1440	1153		6157	755	i 480
Lamb Brothers	57.5L	1-16"				NO DIVERSION							
J. A. Neilson Estate	j 58.3L	k 1-14"	6	40	15	58	103	103	45		370	200	
Alex Grant	58.9L	1-16"			23	28	69	86			206	140	
I. G. Zumwalt	59.1R	1-12"		10		108	84	160	60		422	345	
Lamb Brothers	59.6L	1-14"			288	474	559	495	253		2069		100
W. A. Larner	60.4L	1-14" 1-16"		07	779	543	1232	736	432		4229	944	255
L. A. Butler	60.5L	1-12"		45	49	91	84				269	m 120	
Richard Moore	61.5L	1-12"			13	77	26	82	25		223	104	
L. A. Butler	61.8L	1-12"		18							18	35	
Wayne Hire	62.3R	1-10"		6	26	21	53	66	12		184	n 112	
John Mack	62.3L	1-14"		2	414	537	642	564	203		2362	35	135
Jake Locovich Estate	62.6R	1-8"					16				p 16	35	
KNIGHTS LANDING TO WILKINS SLOUGH Totals			410	20480	37342	37530	43817	41021	15565	110	196275	17797	12969
Average cubic feet per second			7	344	607	631	713	667	262	2	404		
Monthly use in per cent of seasonal			0.2	10.5	19.0	19.1	22.3	20.9	7.9	0.1			
--GAGING STATION - SACRAMENTO RIVER AT WILKINS SLOUGH--	62.9R												
Reclamation District 108 (Wilkins Slough)	63.2R	5-42"		17558	22635	25324	29096	27603	5035		q 127851	r 3750	r,s 11438
R. L. Young	63.3L	1-12"	4	6	18	96	68	98	32	5	327	136	

a Two hundred eighty seven acres of rice listed for Mile 34.5R also received an undetermined amount of the water shown below from Mile 43.1R for flooding only. Six hundred fifty five acres of rice listed for Mile 63.2R also received an undetermined amount of water from Mile 43.1R. Includes 2,329 acre-feet delivered to River Farms Company as follows: April 221, May 9, June 117, July 80, August 450, and September 1446.

b Five hundred and nine acres of general crops and 1,025 acres of rice listed for Mile 43.1R also received an undetermined amount of water from Mile 63.2R. Includes acreage as follows: Reclamation District 108, rice 5,255 and general 807; River Farms Company, general 2,049.

c The rice acreage listed for Mile 46.45L also received an undetermined amount of water from Mile 44.2L and controlled drainage.

d Formerly listed as George J., Jr. and J. H. Henle.

e Includes 378 acre-feet of water spilled into a lake.

f Of this acreage, 75 was double cropped.

g Additional acre-feet diverted: November 50.

h New installation in 1955.

i This acreage also received an undetermined amount of water from controlled drainage, for flooding only.

j Plant moved from Mile 58.2L in 1955.

k Replaces a 15" unit.

m Of this acreage, 70 was double cropped.

n Includes 71 acres of Zumwalt lands.

p Additional acre-feet diverted: November 11.

q Five hundred and nine acres of general crops and 1,025 acres of rice listed for Mile 34.1R also received an undetermined amount of water from Mile 63.2R.

r This acreage also received 1,717 acre-feet of water from plant on Back Borrow Pit, Mile 19.9L and 815 acre-feet of water by controlled drainage.

s Six hundred fifty five acres of rice listed for Mile 63.2R also received an undetermined amount of water from Mile 43.1R.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Meister Ranch	63.65L	1-8"		5		44	23	66	26		164	a 117	
Sutter Mutual Water Company	63.75L	6-42" 2-48"	1059	17394	39348	33164	39489	35189	15580	3482	b 184705	c,d 18698	d 12606
Robert E. Seaman	63.9L	2-14"		134	377	497	612	443	231		2294	e 550	108
--TISDALE WEIR RECORDER STATION--	64.2L												
Ornbaum Livestock Company	64.3R	1-12"		38	49	56	51	68	47	14	323	118	
Lamb Brothers	64.35L	1-14"			260	205	227	208	106		1006		80
Tisdale Irrigation and Drainage Company	64.4L	1-8" 1-12"		369	500	646	639	621	283		3058	f 445	f 120
Van Born Ranch	64.9R	1-14"				69	51	78			198	90	
Juan Velasquez	65.1R	1-4"				13	25	20			58	34	
Fred Schohr	65.6R	1-16"				NO DIVERSION							
Walter Ettl	65.7L	1-8"	12	91	4	139	145	126			517	135	
J. L. Browning	66.4R	1-18"			205		91	160			456	247	
Tisdale Irrigation and Drainage Company	67.1L	1-16" 1-22"		994	1461	1755	1577	1817	849		f 8453	g 1274	321
Newhall Land and Farming Company	67.5L	1-12" 2-24"		1332	1782	2477	2355	2138	689		10773	2257	350
--RECLAMATION DISTRICT 70 DRAIN PLANT--	68.8L												
Meridian Farms Water Company #5	68.8L	1-24"		501	501						1002	h	h
J. L. Browning	69.0R	1-14" 1-22"			70	474	300	273	17		1134	506	
Faxon, Morton, and Andreotti	69.2R	2-16"		734	1145	1310	1389	1312	237		6127	i 450	i 557
--EDDY'S FERRY SITE (GRIMES)--	69.4S												
J. E. Rollenbeck	69.8R	1-4"				NO DIVERSION							
B. P. Daly	70.4L	1-10"		23	35	47	62	65	37	3	272	j 84	
Boffman, Beckley, Ritchie, Poundstone, and Andreotti	70.4R	1-16" 1-20"		387	1278	964	1651	1544	478	11	6313	32	k 525
Meridian Farms Water Company #4	71.1L	1-24"	9	888	1659	1520	1266	1770	1223		8335	h	h
A. B. Armstrong	71.9R	1-14"		278	27	164	282	207			958	m 395	
H. and A. Andreotti	72.1L	2-14"				406	246	250	3		805	285	
C. T. Froh	73.6R	1-10"			35	41	40	35	27		178	81	
Meridian Farms Water Company #3	74.8L	1-18"	18	512	123	620	884	633	250		3040	h	h
L. H. Westfall	75.3R	1-10"			154	242	109	155	92		752	m 232	
J. H. Yates Estate	76.1L	1-10"		26	9	80	37	74			n 226	p 125	
Robert Chesney	76.15L	1-10"			17	13	108	29			167	n,q 140	
M. S. Davis and C. K. Anderson	76.2L	1-8"			24	13		21			58	r 68	
Steidlmayer Brothers	76.5R	1-16"		335			65				400	240	
Olive Percy Davis, et al.	77.8R	1-16"			144	80	44	140	86		494	210	
J. J. Bankins	77.9L	1-16"		91	192	132	92				507	234	
Olive Percy Davis, et al.	78.75R	2-12" 1-16"		566	1661	1033	565	841	385	164	s 5215	561	
Olive Percy Davis, et al.	78.8R	1-24"		1363	2074	2011	2232	1466			9146		s,t 1851
Stiedlmayer Brothers	78.9R	1-12"				191	111	58	61		421	180	
C. E. Reische	79.0L	1-10"		62	56	99	61	78	10		366	u 168	
Gerrans Orchards (v)	79.3R	1-10"			10	26	41	14	13	9	113	w 78	
J. J. Bankins	79.5L	1-8"		13		25	15	17			70	38	
A. M. Wood	79.7L	1-10"				102	9	45			156	x 114	
--GAGING STATION - SACRAMENTO RIVER AT MERIDIAN--	79.8S												
Meridian Farms Water Company #1 and #2	80.0L	1-10" 1-20" 1-24"	957	3257	3553	4424	4961	4897	1441		23490	h,y 6628	h,y 2406

a This acreage was double cropped.
b Includes 7003 acre-feet of water served to lands in Reclamation District 1660 as follows: April 313, May 1,977, June 1,125, July 1,514, August 1,595, and September 479.
c Of this acreage, 1,873 was double cropped.
d Includes 1,048 acres of general crops and 662 acres of rice in Reclamation District 1660
e Of this acreage 240 was double cropped.
f One hundred twenty acres of general crops and 120 acres of rice listed for Mile 64.4L also received an undetermined amount of water from Mile 67.1L.
g Includes 140 acres of F. Winship lands outside of district that received 521 acre-feet of water.
h Combined acreage for Miles 68.8L, 71.1L, 74.8L, and 80.0L.
i Includes 120 acres of rice and 53 acres of general crops that also received an undetermined amount of water from controlled drainage.
j Includes 38 acres of Rohleter lands.
k Includes 25 acres used for warming ponds.
m Includes 110 acres of Steidlmayer lands.
n Forty five acres of general crops listed for Mile 76.15L also received an undetermined amount of water from Mile 76.1L.
p Includes 20 acres of Coffmen lands.
q Includes 15 acres of Miller lands.
r Includes 18 acres of Albertson lands.
s The acreage listed for Mile 78.8R also received an undetermined amount of water from Mile 78.75R.
t Of this acreage, 50 also received an undetermined amount of water from controlled drainage.
u Includes 27 acres of Thomas lands, 27 acres of Lemos lands, 28 acres of Staas lands, and 10 acres of Vannill lands.
v Formerly listed as Richard Wilbur.
w Includes 18 acres of Oil Terminals Company lands.
x Includes 64 acres of Burtis lands.
y Includes 550 acres of rice and 1,111 acres of general crops which also received an undetermined amount of water from controlled drainage.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Gerrans Orchards (a)	80.3R	1-8"			1	40	43			33	117	64	
Wayne Hall Estate and E. J. Burrows	81.5L	1-16"				123	54	61	76		314	65	
Wayne Hall Estate	81.9L	1-16"		287	879	810	514	877	394		4161	113	170
P. T. Reische and L. P. Wood	82.5L	1-12"			24	81	33	34		11	181	80	
Steidlmayer Brothers	83.0R	1-20"	46	407	67	171	226	137	238		b 1292	c 748	
J. E. Clark	83.3L	1-14"				NO DIVERSION							
J. E. Clark	83.5L	1-10"			19	5	11	7			42	25	
--BUTTE SLOUGH OUTFALL GATES--	84.0L												
Reclamation District 1004	85.3L	1-[illegible]"		31	25	17	48	58	7		186	45	
Steidlmayer Brothers	85.6R	1-12"				NO DIVERSION							
Clifford Reichel	85.8L	1-16"			237	245	247	270	252	14	1265	83	96
Lydell Peck	86.1L	1-8"		9	68	37	25		10	15	171	70	
W. N. Halsey	86.1R	1-12"	57	124	164	135	204	122	94	1	901	258	
Howell Davis	86.2R	1-18"				NO DIVERSION							
Mitchel Lobrovich and John Brayovich	86.8L	1-8"		6	32		39				77	45	
Roger Wilbur	86.9R	1-10"	71	176	163	202	239	235	55	55	1196	119	55
Roger Wilbur	87.4R	1-10"	22	38	35	54	43	12			208	55	
W. N. Halsey	87.4SL	1-6"		11		24	13				48	23	
Mrs. D. Locovitch	87.6L	1-8"			15	12					27	12	
Swinford Tract Irrigation Company	87.7R	1-12"		70	111	30	126	1			356	96	
Frank Azevedo	88.0R	1-6"				19	12				31	17	
Nagel and Locovitch	88.2L	1-10"		6	42	24	30	3	11		116	44	
Mayfair Packing Company	88.7L	1-14"		2	192		77			10	d 281	117	
Colusa Irrigation Company	89.2R	1-20"			82	308	189	99			678	291	
Grace S. Arnold	89.2AL	1-8"			48	34	47				129	81	
Reclamation District 1004	89.2SL	1-12" 1-18"		375	925	1008	1153	954	117		4532	e 1050	e,f 1100
W. R. Halsey and M. Yerxa	89.2GL	1-12"			88	64	74				226	116	
WILKINS SLOUGH TO COLUSA Totals Average cubic feet per second Monthly use in per cent of seasonal			2255 37 0.5	48499 815 11.4	82625 1344 19.4	81945 1377 19.2	93469 1520 21.9	85345 1388 20.0	28498 479 6.7	3827 62 0.9	426463 678	42317	31783
--COLUSA BRIDGE - GAGING STATION - SACRAMENTO RIVER AT COLUSA--	89.4R												
Lillian and Hattie Boggs	89.7L	1-10"				NO DIVERSION							
Roberts Ditch Company	90.7R	g 1-18"	239	768	714	960	1106	1004	467	205	b 5463	1484	
I. O. Zumwalt	91.0R	1-6"				NO DIVERSION							
Paul R. Westfall	91.1L	1-8"				19	19		15		53	26	
I. G. Zumwalt	91.6R	1-12"		4	55	10	79		44	39	231	205	
--COLUSA WEIR RECORDER STATION--	92.4L												
George P. Ahlf	92.5L	1-6" 1-10"				NO DIVERSION							
W. R. Halsey	93.0R	1-8"		35		62	31	4			132	40	
Paul R. Westfall	93.3L	1-10"	19	35	28	52	16	50	38		238	123	
Tuttle Land Company	94.3R	1-20"		24	85	261	187	66			623	h 224	
Roger Wilbur	95.2SL	1-12" 1-18"		672	901	872	1069	888	43	92	i 4537	150	j 297
Azro N. Lewis	95.6L	1-12" 1-20"			703	718	1072	785	353		3831	k 450	m 400
J. G. Griffin	95.7SL	1-15"				NO DIVERSION							
J. G. Griffin	95.8L	n 1-26"				67	406	509	403		1385	545	
W. G. Graham	95.8SL	1-16"				NO DIVERSION							
I. G. Zumwalt	96.8R	1-15"		134	98	101	142		27	133	695	340	

a Formerly listed as Roger Wilbur.
b Additional acre-feet diverted: November 1.
c Of this acreage, [illegible] was double cropped.
d Additional acre-feet diverted: November 33.
e Includes [illegible] acres of general crops and 500 acres of rice which also received an undetermined amount of water from controlled drainage. Includes 640 acres general crops and 940 acres of rice which also received an undetermined amount of water from Mile 4.3R on Butte Creek.
f Of this acreage, [illegible] was reused for duck ponds and received 323 acre-feet of water from Mile 4.3R on Butte Creek during November and December.
g A [illegible]" unit was removed in 1955.
h Includes 16 acres of Halsey lands, 20 acres of Mayfair lands, and 10 acres of Indian Service lands.
i Additional acre-feet diverted: November 244 and December [illegible]45.
j This acreage also received an undetermined amount of water from controlled drainage and was reused for duck ponds.
k Includes 100 acres of Munson Estate lands.
m Includes 35 acres which also received approximately 110 acre-feet of water from controlled drainage.
n Previously listed as an 18" unit.

TABLE 178

DIVERSIONS AND ACREAOES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
H. Beltman	97.7R	a 1-14"	6	9	61	86	248	94	81	76	b 661	88	
Frank N. Beckley	98.0L	1-10"	22	39	39	60	121	82			363	152	
J. L. Erisey	98.3R	1-10"	26	100	90	94	124				434	135	
Otterson and Boggs	98.6L	1-15"				NO DIVERSION							
D. Boggs	98.8L	1-18"		7	27	39	115	42	32	6	268	132	
Elizabeth Reimer	99.0R	1-14"			151	104	170	121	62		608	170	
J. E. Boggs	99.1L	1-10"		7	33	42	41				123	c 95	
Bollis Sartain	99.2L	1-20"				NO DIVERSION							
L. W. Seaver	99.3R	1-10" 1-12"	101	89	181	290	245	93	165		d 1164	e 335	
Dave George	99.8L	1-4" 1-16"				233	217	184	86	1	721	325	
St. Patrick Home Ranch	101.1R	1-20"	43	423	638	875	884	507			f 3370	g 817	g 212
Jane Foster Carter	101.8L	1-14"		28	49	3	68	63	15		226	203	
Nettie, George, and Ella Packer	102.8R	2-12" 1-20"		385	611	558	733	532	44		2863	165	384
C. B. Carter	102.9L	1-16"		56	114	117	196	125	29		637	h 274	
--GAGING STATION - SACRAMENTO RIVER OPPOSITE MOULTON WEIR--	i 103.3												
--MOULTON WEIR RECORDER STATION--	j 103.6L												
Charles W. Welch	103.7R	1-16"		391	657	657	797	730	209	8	3449	180	k 900
Charles W. Welch	103.8R	m 1-14" 1-20"		1076	1053	1541	1676	1197	36		6579		k
C. W. Tuttle	103.9R	1-12" 1-18"		993	497	940	718	506	39		3693	40	565
I. G. Zumwalt	104.8L	1-12"		57		71					128	135	
I. G. Zumwalt (n)	105.3L	1-12"				23	23				46	120	
Lawrence Boyd	105.5L	1-10"		3		2	3	3			11	10	
Thousand Acre Ranch (H. W. Keller)	106.0R	1-14"		53	49	96	78	17			293	160	
Olive Percy Davis, et al.	106.5R	2-16"		222	346	678	740	711	79		2776	551	92
Princeton Ranch Company	110.0R	1-12"			104	78	93			106	381	180	
H. Womble	110.1L	p 2-16"		351	704	639	686	581	90		3051	135	240
I. G. Zumwalt	110.7L	1-12"				119					119	170	
Princeton Ranch Company	111.2R	1-6"				PLANT REMOVED							
--PRINCETON FERRY--	112.0												
I. G. Zumwalt	112.05L	1-12"			24		27		21		72	65	
Reclamation District 1004	112.1L	2-30" 1-50"		5188	11506	11120	13333	12019	4054	66	57286	q 2125	q 6259
Princeton-Codora-Glenn Irrigation District	112.4R	3-24"	208	3610	3185	5461	5535	4345	1098		23442	r 2438	r 4806
I. G. Zumwalt	112.6L	1-10"			82	54	103		13		252	357	
Emerson B. Estes	114.9R	1-5"				11	18	14			43	35	
L. B. Lucas	115.4R	1-4"				10	22	17	4		53	17	
Opal L. Cushman	115.5L	1-12"		72	131	78	155	148	106		690	154	
COLUSA TO BUTTE CITY Totals Average cubic feet per second Monthly use in per cent of seasonal			664 11 0.5	14831 249 11.3	22916 373 17.5	27261 458 20.8	31296 509 23.9	25637 417 19.6	7653 129 5.8	732 12 0.6	130990 270	13350	14155
--BUTTE CITY BRIDGE--	115.8												
--GAGING STATION - SACRAMENTO RIVER AT BUTTE CITY--	115.8L												
L. B. Lucas	115.8R	1-1½" 1-6"		3		50	95	24	21		193	s 65	
R. H. Gebicke	115.85L	1-14"				104	124	92	3		323	175	
L. D. Ohlson	115.9R	1-4"				PLANT REMOVED							

a Replaces a 12" unit.
b Additional acre-feet diverted: November 18.
c Includes 20 acres of Sartain lands.
d Additional acre-feet diverted November 19.
e Includes 26 acres of Middlecamp lands and 80 acres of Reimer lands.
f Additional acre-feet diverted: February 367.
g The rice acreage and 677 acres of general crops also received an undetermined amount of water from wells.
h Of this acreage, 28 was double cropped.
i Gaging station moved to this location from Mile 103.9 in June 1955.
j Previously listed as Mile 104.0L.
k Combined acreage for Miles 103.7R, 103.8R and plants on Colusa Trough at Miles 11.7L (0.2) and 11.7L (0.3).
m The 20" unit was installed in 1955.
n New installation in 1955.
p One 16" unit was installed in 1955.
q Combined acreage for Mile 112.1L and plants on Butte Creek Miles 11.8R (2.6) and 14.4R (0.2). Includes 155 acres of general crops and 602 acres of rice outside the district.
r Combined acreage for Miles 112.4R and 123.9R and plant on Colusa Trough, Mile 17.2L. Includes 67 acres of general crops that received 335 acre-feet of water from O. C. I. D. Plant at Mile 154.8R.
s Includes 56 acres of Ohlson lands.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Manuel Torres (a)	116.37L	1-12"				NO DIVERSION							
Cronin Estate	116.9L	1-16"				NO DIVERSION							
L. D. Ohlson (b)	117.1R	1-10"				27	60	46			133	90	
W. F. Wright, Jr.	117.5R	1-6"				27	37		16	33	113	136	
W. H. Stewart, Jr.	120.3R	1-10"				7	26				33	40	
Robert T. Miller	122.3R	1-10"				NO DIVERSION							
Clarence Reed	123.7R	1-6"		10			18		5		33	c 35	
P. K. Friesen	123.8R	1-4"		1				1			2	2	
Princeton-Codora-Glenn Irrigation District	123.9R	5-24"	868	9866	9217	8823	9154	9015	4084	979	52006	d	d
Provident Irrigation District	124.2R	2-24" e 3-36"		3155	3503	5238	5759	5655	1195		f 24505	g 1461	g 7504
J. Bertapelle	124.3R	1-12"	40	216	167	307	212	345	235	45	h 1567	i 365	
Joe Thomas	125.5R	1-12"				32	34	33	3	27	129	48	
Duard F. Geis	128.3R	1-6"				36	87	64	32	24	243	87	
F. S. Reager	130.75R	1-8"	34	40	61	53	127	102	71	4	j 492	k 254	
--GAGING STATION - SACRAMENTO RIVER AT ORD FERRY--	130.8R												
O. D. Simmons (b)	131.0L	1-4"						11	25	9	45	85	
Harry E. Nichols Jr. (m)	133.45L	1-6"				35	62	24			121	n 68	
Harry E. Nichols Jr. (m)	133.5L	1-5"				14	8				22	40	
--STONY CREEK--	138.0R												
--CHICO CREEK--	141.5L												
M. & T. Incorporated and Parrott Investment Company	141.5L	1-20" 4-24"	397	1490	1986	2718	4861	5620	1355	215	(p) 18642	1364	2208
Frank C. Brazell (b)	141.5L	1-4"						9			9	40	
--OLD CHICO LANDING RAILROAD BRIDGE SITE--	142.1												
W. B. Fischer	142.8R	1-14"	12	27	56	113	178	197	81	164	q 828	134	
Leonard Horning	143.6R	1-10"					12	19	17	5	53	52	
J. O. Bentz	143.8L	1-6"				26	60	37	42		165	42	
Glenn Beagle	146.3L	1-6"				NO DIVERSION							
Leonard Horning	146.8R	1-3"				7	7	4	2	1	21	9	
Holly Sugar Corporation	148.9R	1-2" 1-10"				NO DIVERSION							
Wallace E. Ferrin and George A. Zundel	149.5L	1-12"				209	375	161			745	225	
--GAGING STATION - SACRAMENTO RIVER AT HAMILTON CITY (GIANELLA BRIDGE)--	149.5L												
J. A. and A. E. Lewis	149.7L	1-12"		69	76	77	99	97	94	39	551	r 300	
James A. Lewis	150.0L	1-10"		23	19	58	106	90	92		388	r	
V. O. Strain	150.8R	1-12" 1-16"	102	124	211	411	551	652	155	53	s 2259	650	
Joe E. Johnsen	152.2R	1-6"		6	9	13	18	19	16	6	t 87	31	
W. M. Edwards and Son	152.4R	1-6"				NO DIVERSION							
Jessie and McClain	154.6R	1-5"					11	4	3		18	12	
O. G. Maas	154.7R	1-4"				3		2			5	9	
Jacinto Irrigation District	154.75R	1-36" 1-48"	3801	9989	10544	10110	10496	10550	9436	9510	u 74436	7911	1640
Glenn-Colusa Irrigation District	•154.8R	1-42" 1-48" 4-66" 3-72" 1-100"	13988	95926	117880	123832	127712	123991	59287	37147	v 699763	w 28142	w 45849

• This is a common point of diversion for Glenn-Colusa, Compton-Delevan, and Maxwell Irrigation Districts.
a Formerly listed as A. J. Stone.
b New installation in 1955.
c Of this acreage, 15 was double cropped.
d Combined acreage for Miles 112.4R, 123.9R, and plant on Colusa Trough, Mile 17.2L.
e One 36" unit was installed in 1955.
f Additional acre-feet diverted: January 212, November 255, and December 1,304.
g Combined acreage for this plant and plants on Colusa Trough, Opposite Miles 20.5R (2.4), 24.2R (1.5), 26.0R (2.5), 27.2R (2.6), and Mile 27.2R (0.1). Includes 414 acres of rice and 100 acres of general crops that received 3,812 acre-feet of water from Glenn-Colusa I. D. Plant at Mile 154.8R.
h Additional acre-feet diverted: November 83.
i Of this acreage, 160 was double cropped.
j Additional acre-feet diverted: November 16.
k Of this acreage, 8 was double cropped.)
l Formerly listed as E. S. Ballard.
n Includes 8 acres that also received an undetermined amount of water from controlled drainage.
p Additional acre-feet diverted: January 16, February 10, November 181, and December 111. An additional 18,530 acre-feet received from Butte Creek as follows: March 181, April 3,221, May 3,747, June 3,856, July 2,347, August 2,133, September 1,782, and October 1,263.
q Additional acre-feet diverted: November 26.
r Combined acreage for Miles 149.7L and 150.0L.
s Additional acre-feet diverted: February 27 and November 38.
t Additional acre-feet diverted: November 1.
u Quantities shown are diversion at Mile 154.75R to the Glenn-Colusa I. D. Canal. Additional acre-feet diverted: November 3,021.
v Additional acre-feet diverted: November 15,663. Additional acre-feet diverted by gravity from Stony Creek as follows: March 2, April 3,200, and May 1,940. An additional 9,554 acre-feet was diverted by plant on Back Borrow Pit, Mile 29.8R (1.4). Includes 3,812 acre-feet served to 414 acres of rice and 100 acres of general crops listed for Mile 124.2R. Includes 335 acre-feet served to 67 acres of general crops listed for Mile 112.4R. Includes 3,500 acre-feet served to Compton-Delevan I. D. listed at Mile 154.8R.
w Includes the following acreage outside the district: Rice 1,074 and general 59. Of the rice acreage, 1,195 inside the district and 139 outside the district was reused for duck ponds.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Compton-Delevan Irrigation District	*	*									a	432	1834
Maxwell Irrigation District	*	*									b	b	b
J. Ewert	155.6R	1-4"	3	6	23	2	12	11	13	5	c 75	27	
R. Pheiffer	155.7R	1-2½"	1	2	5	6	5	4	5	3	d 31	7	
F. Williams	156.0R	1-6"		1	1	1	6	7	5	1	22	12	
B. H. Penner	e 156.1R	1-6"		1	10	23	34	26	14	8	f 116	g 51	
O. L. Shearman	156.8R	1-2½"		1	1	2	2	2	1	1	10	4	
Taresh Ranch	158.8R	1-10"	3	24	9	58	86	64	48	16	308	100	
Jonathan Garst	161.7L	1-8"		64				6			70	104	
--GAGING STATION - SACRAMENTO RIVER AT VINA BRIDGE--	166.5R												
E. L. Dietz	166.7R	1-3"				NO DIVERSION							
Russell L. Deckman	166.8R	1-2"			1	1	1	1	1	1	6	9	
Ernest Peterson	166.9R	1-6"	6	2	7	10	11	9	5	1	h 51	41	
--DEER CREEK--	168.5L												
A. J. McFadden	168.5L	1-8"			6	37	42	78	33	1	197	69	
C. F. O'Connor	i 168.85R	1-10"					56	17	15		88	j 50	
C. F. O'Connor	168.9R	1-6"					13	13	14		40	j	
Rumiano Brothers	169.8L	1-10"	7		61	6	103	49		6	k 232	120	
Dr. O. T. Wood	173.7L	1-8"	44		84	31	24	25	44		252	170	
Dutro Brothers	m 175.5L	1-5"	19		23	31	37	32	15	11	168	n	
Dutro Brothers	176.6R	1-4"		5	6	21	51	42	13	7	145	n 117	
--TEHAMA BRIDGE--	177.5												
--MILL CREEK--	179.0L												
--ANTELOPE CREEK--	180.3L												
Los Molinos Mutual Water Company	187.6L	1-12"				34	184	108			326	p 505	
Henry Tieden	188.5L	1-1½"			1	1		1	1		4	6	
L. F. Bray	188.51L	1-2½"		1		5	3	3	3	1	16	13	
Henry Kerber	188.6L	1-10"		63	129	54	76	60	42	45	469	126	
--RED BLUFF BRIDGE--	193.45												
Arthur Stanley	196.5L	1-2½"				1	1				2	10	
S. and E. Erickson	196.6L	1-5"		8	11	16	31	11	6		83	37	
Diamond Match Company	197.0L	1-6"	16			44	91	66	8	33	258	50	
J. W. Bulkely	197.5L	1-1¼"				1					1	4	
C. A. Droz	198.0L	1-3"		8	16	22	25	24	15	14	q 124	64	
BUTTE CITY TO RED BLUFF Totals			19341	121131	144123	152737	161183	157523	76571	48415	881024	44000	59035
Average cubic feet per second			315	2036	2344	2567	2621	2562	1287	787	1813		
Monthly use in per cent of seasonal			2.2	13.7	16.4	17.3	18.3	17.9	8.7	5.5			
--GAGING STATION - SACRAMENTO RIVER NEAR RED BLUFF--	198.6												
C. T. Loftus	205.1L	1-4"	1	2	5	8	12	11	6	6	q 51	62	
--BEND FERRY BRIDGE--	207.0												
D. Mills	207.3L	1-8"	51	42	100	89	115	112	60		569	110	
D. Mills	207.5L	1-12"	94	99	187	190	245	221	101	52	1189	281	
G. Tetzlaff	209.0L	1-4"			11	25	23	13	1		73	32	
Table Mountain Gun Club	210.0R	1-2½"							1		r 1	13	
J. F. Nunes	213.0R	1-7"					NO DIVERSION						
F. L. Jelly	213.5L	1-3"				7	15	11	7	5	45	20	
J. F. Nunes	216.0R	1-5"			14	20	17	25	12	5	93	16	
--JELLY PERRY BRIDGE--	216.0												
W. A. Runaeus	216.4L	1-3"			6	9	16	13	7	5	h 56	13	

* This is a common point of diversion for Glenn-Colusa, Compton-Delevan, and Maxwell Irrigation Districts.
a Glenn-Colusa I. D. served 3,500 acre-feet of Sacramento River water and 13,332 acre-feet of controlled drainage water to this district.
b The district served water derived from controlled drainage to 595 acres of rice and 780 acres of duck club lands.
c Additional acre-feet diverted: November 4.
d Additional acre-feet diverted: February 1 and November 2.
e Plant moved from Mile 156.02R in 1955.
f Additional acre-feet diverted: November 5.
g Includes 4 acres of Willems lands.
h Additional acre-feet diverted: November 2.
i Plant moved from Mile 169.1R in 1955.
j Combined acreage for Miles 168.85R and 168.9R.
k Additional acre-feet diverted: November 12.
m Portable unit diverted between Miles 175.5L and 176.6L in 1955.
n Combined acreage for Miles 175.5R and 176.0R.
p This acreage also received an undetermined amount of well water and water from Antelope Creek.
q Additional acre-feet diverted: November 1.
r Additional acre-feet diverted: January 5.

TABLE 178

DIVERSIONS AND ACREAGES IRRIGATED - SACRAMENTO RIVER - 1955 (contd.)

Water User	Mile and Bank above Sacramento	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Nsakoneon Brothers	217.5L	1-5"		15	54	123	96	97	56	22	a 463	78	
J. L. Haskins	217.9L	1-6"		17	43	72	104	45	22	22	b 325	50	
J. L. Haskins	218.6L	1-5"					PLANT REMOVED						
Rio Alto Rancho	221.0R	1-18"	3	13	43	400	267	228	145	89	c 1188	398	
--BATTLE CREEK--	221.5L												
--COTTONWOOD CREEK--	222.2R												
--GAGING STATION - SACRAMENTO RIVER AT BALLS FERRY--	224.5												
J. N. Trisdale	228.[illegible]R	1-16"		54	89	160	145	112	63	52	675	100	
--ANDERSON BRIDGE--	232.9												
Floyd Leonard	233.5L	1-6"		9	27	43	39	48	19		185	23	
United States Plywood Corporation (d)	234.0R	1-8"							2	2	4	e 5	
--CLEAR CREEK--	237.1R												
William Menzel Co., Inc.	240.2L	1-12"		26	201	385	469	474	234		1789	197	
Lou Gerard	240.3L	1-2"		2	7	10	11	10	5	7	52	5	
John Gladwell	240.4L	1-4"				1	1				2	7	
Anderson-Cottonwood Irrigation District	240.5L	4-16"	657	1662	2816	3439	3691	3678	3313	2220	f 21476	2293	
--GAGING STATION - SACRAMENTO RIVER NEAR REDDING--	240.7												
Riverview Golf Course	240.8L	1-4"	5	9	29	35	34	29	28	26	g 195	30	
--HIGHWAY 44 BRIDGE--	242.0												
--HIGHWAY 99 BRIDGE--	245.9												
Anderson Cottonwood Irrigation District	246.0R	Gravity	4128	23223	24628	23914	24541	24453	22447	21530	h,i 168804	20267	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	246.25												
Maybell Diestelhorst	246.3R	1-8"		5	32	28	29	39	21	12	j 166	22	
--OLD REDDING-YREKA BRIDGE--	246.4												
City of Redding	246.7R	3-8"	206	204	356	533	585	651	436	302	k 3275	Municipal	
--GAGING STATION - SACRAMENTO RIVER AT KESWICK--	250.5												
RED BLUFF TO REDDING													
Totals			5145	25382	28648	29491	30455	30270	26988	24357	200736	24022	0
Average cubic feet per second			84	427	466	496	495	492	454	396	413		
Monthly use in per cent of seasonal			2.6	12.6	14.3	14.7	15.2	15.1	13.4	12.1			
SACRAMENTO TO REDDING													
Totals			30835	247756	300053	378179	417899	395677	183419	81863	2095681	165713	136355
Average cubic feet per second			501	4164	5856	6356	6796	6435	3083	1331	4312		
Monthly use in per cent of seasonal			1.5	11.8	17.2	18.0	19.9	18.9	8.8	3.9			

a Additional acre-feet diverted: November 23.
b Additional acre-feet diverted: November 11.
c Additional acre-feet diverted: November 36.
d Installed prior to 1955 not previously listed.
e Log pond. No agricultural use.
f Additional acre-feet diverted: November 168.
g Additional acre-feet diverted: November 1 and December 1.
h Includes the following acre-feet of operational spill: March 663, April 7,288, May 2,874, June 956, July 1,301, August 716, September 2,153, and October 3,124
i An additional 9,768 acre-feet was diverted in November of which 6,207 acre-feet was operational spill.
j Additional acre-feet diverted: November 6.
k Additional acre-feet diverted: January 189, February 154, November 190, and December 166.

TABLE 17y

DIVERSIONS AND ACREAGES IRRIGATED - COLUSA TROUGH** - 1955

Water User	Mile and Bank **	Number and Size of Pump	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated General	Acreage Irrigated Rice
--GAGING STATION - COLOSA TROUGH AT COLUSA-WILLIAMS HIGHWAY--	0.0												
I. G. Zumwalt	2.2L	8-20"	884	2625	3326	4617	4624	5360	1902	1036	a 24394	b,c 3570	c 2025
East Williams Lands Company	2.2R	1-16"				NO DIVERSION							
J. B. Cave	2.98R	1-10"			87	197	255	140	120	36	d 835	e 20	f 80
A. E. Zaniboni and L. W. Seaver	3.0L	3-16"	358	561	777	833	951	782	503	254	g 4739	600	
J. H. Cave	3.5R	1-14"							46	169	h 215	e 104	
Lloyd W. Seaver and F. J. Byington	4.5L	4-16"		475	1105	1111	1112	1019	112	34	i 5028	e 10	j 901
Goffman and Campbell	5.6L	1-16"				NO DIVERSION							
Louis G. Sutton	5.7R	1-16"				NO DIVERSION							
Watt Brothers	6.2L	2-16"		119	334	467	402	284	21		1687		185
Watt Brothers	6.4R	1-12"			224	178	184	186	71		843		104
S. Ash	8.0L	2-16"		423	325	373	482	462	31		2096		185
Charles W. Welch	8.0R	1-15" 1-16"				NO DIVERSION							
El Dorado Sportsmans Club	9.5R	1-16"						34	195	158	k 387	e 320	
I. G. Zumwalt	9.75L	1-24"		533	405	380	488	476	46	14	m 2342		360
Lloyd Kahn	10.5L (0.4)	2-16"		430	470	382	383	337	4	44	2050	e 18	242
Charles W. Welch	11.7L (0.2)	1-12"		174	347						521		n
Charles W. Welch	11.7L (0.3)	1-12"		269	160						429		n
Charles W. Welch	11.7R (0.8)	1-14" 1-16" 2-20"		2088	1890	3058	3509	3651	324	20	p 14540		q,r 1700
Del Valley Farms, Incorporated	12.1R	1-10"							91	74	s 165	e 40	
Lynn and Bohne	12.58L (0.9)	1-10" 1-12"				NO DIVERSION							
Lynn and Bohne	12.59R	1-12"								102	t 102	e 25	
Nelphanetine Rice Lands	12.69L	1-16"		253	716	763	757	610	211	12	u 3322		v 260
E. Butler, E. Mayer, and J. Jones	12.7L	1-14"		115	155	227	241	226	48	50	w 1062	e 34	67
Manuel Barrett	Opp. 16.6R (1.3)	1-12"		96	75	232	227	255	5		890		c 180
Princeton-Codora-Glenn Irrigation District	17.2L	2-18"		1494	2099	2322	2321	2263	212		10711	x	x
John S. Lopes	17.9R	1-12"				NO DIVERSION							
J. P. Cardoza	18.0R	1-4"	6	3	3	6	7	6	15	8	y 56	z 45	
Provident Irrigation District (Willow Creek Plant)	Opp. 20.5R (2.4)	1-24" 1-36"		294	68	451	270	25			1108	aa	aa
--LATERAL HIGHWAY - BUTTE CITY TO WEST SIDE--	20.5												
Walter McGowan	21.4L	1-8" 2-16"		318	468	587	672	683	167		2895		201
Joe Navarro	22.0R	1-18"		91	208	209	177	160	51		916		75
Provident Irrigation District (Drain #55)	Opp. 24.2R (1.5)	Gravity	492	4802	7660	7067	8118	8109	5255	3552	ab 45055	aa	aa
Dorothy Foote (ac)	25.4L	1-16"		64	228	260	292	333	81		1258		158
Provident Irrigation District	Opp. 25.8L (2.5)	2-16"	32	246	745	566	428	525	14		2556	aa	aa
Tarrill Knight (ad)	26.2L	1-12" 1-16"		485	410	449	483	505	5		2337		245
John M. Dammer and Mary R. Bohach	27.1L	1-12" 1-14"		32	26	66	101	80		1	306	90	
Provident Irrigation District (Colusa Drain)	27.2R (0.1)	1-20" 1-24"		1851	2144	1316	1399	995	247		7952	aa	aa
Provident Irrigation District (Drain #13)	Opp. 27.2R (2.6)	1-16" 1-20" 1-24"	1	679	1160	1641	1700	1750	648		7579	aa	aa

* Main drain of Reclamation District 2047.
** Mileage along Colusa Trough above Colusa-Williams Highway.
a Additional acre-feet diverted: January 34 and November 229.
b Of this acreage 240 was reused for duck ponds.
c This acreage also received an undetermined amount of water from controlled drainage.
d Additional acre-feet diverted: November 33.
e All duck club lands.
f This acreage was reused for duck ponds.
g Additional acre-feet diverted: November 55.
h Additional acre-feet diverted: November 10.
i Additional acre-feet diverted: November 8.
j Includes 248 acres which also received an undetermined amount of water from controlled drainage.
k Additional acre-feet diverted: January 70 and November 40.
m Additional acre-feet diverted: December 114.
n See plant on Sacramento River, Mile 103.7R.
p Additional acre-feet diverted: December 242.
q Of this acreage, 150 was reused for duck club.
r Includes 700 acres which also received an undetermined amount of water from Stone Corral Creek.
s Additional acre-feet diverted: November 32 and December 33.
t Additional acre-feet diverted: January 43 and December 13.
u Additional acre-feet diverted: January 22, November 14, and December 15.
v Of this acreage, 15 was reused for duck club.
w Additional acre-feet diverted: November 4 and December 3.
x See plant on Sacramento River, Mile 112.4R.
y Additional acre-feet diverted: January 7, February 1, November 22, and December 22.
z Includes 25 acres of duck club lands.
aa See plant on Sacramento River, Mile 124.2R
ab Additional acre-feet diverted: November 1769 and December 660.
ac Formerly listed as I. G. Zumwalt.
ad Previously listed as Terril Knight.

TABLE 179

DIVERSIONS AND ACREAGES IRRIGATED - COLUSA TROUGHe - 1955 (contd.)

Water User	Mile and Bank ee	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Provident Irrigation District (Drain #13)	Opp. 27.2R (2.0)	Gravity	319	1339	1525	764	918	1067	1084	1240	a 8256	b	b
Totals			2092	19879	27200	28522	30261	30305	11509	6804	150632	4936	6968
Average cubic feet per second			35	323	457	464	506	510	187	114	322		
Monthly use in per cent of seasonal			1.3	12.7	17.4	18.2	19.3	19.4	7.4	4.3			

e Main drain of Reclamation District 2047.
ee Mileage along Colusa Trough above Colusa-Williams Highway.

a Additional acre-feet diverted: November 957 and December 474.
b See plant on Sacramento River Mile 124.2R.

TABLE 180

DIVERSIONS AND ACREAGES IRRIGATED - BACK BORROW PITe - 1955

Water User	Mile and Bank ee	Number and Size of Pump	Monthly Diversions in Acre- Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
E. E. Nuttall (a)	0.2R												
--GAGING STATION - COLUSA BASIN DRAIN AT KNIGHTS LANDING (KNIGHTS LANDING OUTFALL GATES)--	0.2S												
River Farms Company	0.3L	1-10" 1-20"		242		367					609	b	b
--KNIGHTS LANDING RIDGE CUT--	0.4R												
John J. Anderson	1.45R	2-16"				NO DIVERSION							
John C. Cooling	4.2R (0.1)	1-16"		592	847	748	786	773	168		3914		301
J. E. Taylor	4.2R (0.7)	1-12"	13	19	10	16	44	31	29		162	65	
B. C. and T. D. Tolson	4.2R (0.8)	1-18"	1	386	686	712	776	753	277		3591		200
W. Crawford	4.35R	1-20"		786	1174	1046	1125	1104	207	286	c 5728	100	d 500
W. Crawford	7.2R	1-16"				NO DIVERSION							
George E. Youngmark	8.8R	1-14" 1-16"		246	900	668	646	690	44		3194	147	475
Hershey Estate	11.15R	1-16" 1-18"		549	1426	1305	1653	1896	264	111	e 7204		f 681
Hershey Estate	13.7R	1-16"				NO DIVERSION							
C. M. Mumma	14.75R	1-10"				NO DIVERSION							
--COUNTY LINE BRIDGE--	15.2S												
J. V. Doherty	15.5R g	1-12"			227	256	257	214	152		1106		80
M. T. Emmert	15.75R	1-12"				NO DIVERSION							
M. B. West, Jack Hughes, and Dr. R. C. West	18.1R	1-15" 1-20"			197	178	470				845	300	
James Iriart (h)	18.5R (0.8)	1-14"		15	45	116	126	115	45		464	130	
--RECLAMATION DISTRICT 108 GRAVITY DRAIN--	19.9L												
Reclamation District 108	19.9L	1-16" 1-24" 1-30"		1071		646					1717	i	i
William West	20.0R	1-15"			221	3	398	214			870	253	
B. W. Whitmire and O. S. Adams	21.35R	2-16"	5	6	62	202	132	109	42	145	j 764	k 362	
Albert Brandenburg	22.15R	1-14"			161	270	308	299	161		1199		m 108
Aileen B. Armstrong	22.65L	1-16" 1-20"				PLANT REMOVED							

a Carries return water from Colusa Basin along west border of Reclamation Districts 108 and 787 and thence discharges to Sacramento River at Mile 14.15R or partial diversion via Knights Landing Ridge Cut.
ee Mileage along Borrow Pit from junction with Sacramento River.
a See plant on Sacramento River, Mile 14.15R (0.2).
b See plant on Sacramento River, Mile 14.5R.
c Additional acre-feet diverted: January 41, November 380, and December 104.
d Of this acreage, 100 was reused for duck ponds.
e Additional acre-feet diverted: November 76 and December 118.
f Of this acreage, 55 was reused for duck ponds.
g Replaces a 10" unit.
h Formerly listed as Hilary Farms, Incorporated.
i See plant on Sacramento River, Mile 63.2R.
j Additional acre-feet diverted: November 13 and December 31.
k Includes 40 acres of duck ponds.
m Includes 60 acres of Lundeen lands.

TABLE 180

DIVERSIONS AND ACREAGES IRRIGATED - BACK BORROW PIT* - 1955
(contd.)

Water User	Mile and Bank **	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--GAGING STATION - BACK BORROW PIT NEAR COLLEGE CITY--	22.7												
Aileen B. Armstrong	22.75R (0.1)	1-14" 1-16"			26	21	60			3	110	110	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	23.6												
Baledon Ranch	Opp. 24.6L (0.3)	2-16" 1-20"	103	206	171	536	720	827	103	76	a 2802	825	
Baledon Ranch	24.6R (0.3)	2-16"	109	68		166	44	197			584	200	
A. M. Dobrosky and Henry Olin	24.7L	1-12"				PLANT REMOVED							
Lute King	25.1R	1-6"				29	62	41	1	1	134	151	
Gertrude M. Sherer	25.3L	1-16"				NO DIVERSION							
Gertrude M. Sherer	25.5R	1-10"			4	20	16	4	9		53	40	
--GRIMES-COLLEGE CITY CAUSEWAY--	25.5												
Fred Schutz	25.9L (0.2)	1-16" 1-20" 1-24"			57	96	135	85	29		402	180	
Roy E. Kitts	26.4R (0.1)	1-18"		130	403	437	405	347	171		1893	150	200
C. W. and M. F. Struckmeyer	27.25L (0.3)	1-16"			87	182	187	169	3	3	631	271	
William P. Wallace Ranch	28.0R	1-12" 1-16"				NO DIVERSION							
--WALLACE CROSSING (OLD MERIDIAN-WILLIAMS BRIDGE)--	29.2												
Olive Percy Davis, et al.	b 29.8R (0.4)	1-16"		174	758	768	820	870	161		3551		c,d 400
Fred Wilkins	29.8R (1.0)	1-14"				NO DIVERSION							
Glenn-Colusa Irrigation District	29.8R (1.4)	1-20" (e) 2-38"		1349	318	2378	3530	1979			9554	f	f
Olive Percy Davis, et al.	31.5L	1-24"				NO DIVERSION							
Olive Percy Davis, et al.	32.1R	1-16"		130	845	878	900	940	167		3860		c
Federal Fish and Wildlife Service	32.6R	1-16"			275	158	416	617	485	438	g 2389	h 295	
J. G. Olvey	32.6L	1-14"		72	527	456	515	555	208		i 2333		j 129
Arata Brothers	32.9L	1-8"								81	k 81	m 25	
Richard Moore	33.5L	1-12" 1-16"		306	526	560	559	467	12		2430		290
Federal Fish and Wildlife Service	36.65R	1-15" 1-20"		574	879	857	941	1010	953	812	n 6026		p 640
Federal Fish and Wildlife Service	37.0L (0.1)	1-15"							140		m 140	k 130	
--COLUSA-WILLIAMS HIGHWAY--	37.0												
Totals			231	7042	10832	14111	16031	14306	3831	1956	68340	3734	4004
Average cubic feet per second			4	118	176	237	261	233	64	32	141		
Monthly use in per cent of seasonal			0.3	10.3	15.9	20.6	23.5	20.9	5.6	2.9			

* Carries return water from Colusa Basin along west border of Reclamation Districts 108 and 787 and thence discharges to Sacramento River at Mile 34.15R or partial diversion via Knights Landing Ridge Cut.
** Mileage along Borrow Pit from junction with Sacramento River.
a Additional acre-feet diverted: December 166.
b Plant moved from Mile 29.8R in 1955.
c Combined acreage for Mile 29.8R (0.4) and 32.1R.
d Includes 60 acres Federal Fish and Wildlife Service lands.
e One 38" unit was installed in 1955.
f See plant on Sacramento River, Mile 154.8R.
g Additional acre-feet diverted: November 324 and December 105.
h All duck refuge lands. Includes 70 acres which also received an undetermined amount of water from controlled drainage.
i Additional acre-feet diverted: November 26 and December 37.
j Includes 29 acres Olive Percy Davis, et al. lands. Of this acreage, 50 was reused for duck ponds.
k Additional acre-feet diverted: November 14.
m All duck club lands.
n Additional acre-feet diverted: November 40 and December 240.
p All duck refuge lands.
q Additional acre-feet diverted: November 7.

TABLE 181

DIVERSIONS AND ACREAGES IRRIGATED - KNIGHTS LANDING RIDGE CUT - 1955

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--STATE HIGHWAY 24 BRIDGE--	0.3												
--SOUTHERN PACIFIC RAILROAD BRIDGE--	0.7												
E. L. Wallace	0.8R	1-16" 1-20"	114	1394	1273	1580	1775	1917	736		8789	a,b 920	a 720
M. R. Richardson	0.82L	1-14"				NO DIVERSION							

* Mileage downstream from head on Back Borrow Pit near Knights Landing. Flow is principally Colusa Basin drainage diverted to the Ridge Cut by checking at Knights Landing Outfall Gates on Back Borrow Pit of Reclamation District 787.
a This acreage also received an undetermined amount of well water.
b Includes 188 acres which also received an undetermined amount of water from controlled drainage.

TABLE 181

DIVERSIONS AND ACREAGES IRRIGATED - KNIGHTS LANDING RIDGE CUT - 1955 (contd.)

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--RECLAMATION DISTRICT 730 DRAIN PLANT #2--	3.2R												
Ralph W. Pollock	3.5L	Gravity		43	[illegible]	43	21	19	41		204	a 118	
W. K. Lowe	4.3R	3-16"		1426	1107	1349	1340	1308	300		6830		450
Ralph W. Pollock	4.5SL	1-16"				25	30	73	2		130	93	
Albert Bacchini	4.7R	1-8"			24		15				47	23	
Hershey Estate (b)	4.7SL	1-24"		431	343	322	325	[illegible]5	32		1822		240
Layton D. Knaggs	5.25R	1-16"					282				282	195	
--WEST LEVEE YOLO BY-PASS--	5.3												
Sacramento River Ranch	6.3L	Gravity		[illegible]93	1017	1126	1462	1228	734		c,d [illegible]960	c 1390	c 530
Hershey Estate (e)	6.3	Gravity		445	874	840	796	[illegible]45	135		3555	d 750	f 275
Hershey Estate (g)	[illegible].3R	Gravity				430	917				1347	600	
Totals			114	4132	4675	5715	[illegible]967	5383	1980	0	28966	4089	2215
Average cubic feet per second			2	69	76	96	113	88	33	0	60		
Monthly use in per cent of seasonal			0.4	14.3	16.1	19.7	24.1	18.6	6.8	0			

* Mileage downstream from head on Back Borrow Pit near Knights Landing. Flow is principally Colusa Basin drainage diverted to the Ridge Cut by checking at Knights Landing Outfall Gates on Back Borrow Pit of Reclamation District 787.
a This acreage also received an undetermined amount of well water.
b New installation in 1955.
c Includes 2,057 acre-feet of water served to 610 acres of general crops and 240 acres of rice in Reclamation District 1600.
d Three hundred and forty acres of general crops listed for Mile 6.3 also received 216 acre-feet of water from Mile 6.3L.
e Previously listed as H. Rich and L. Knaggs.
f This acreage also received 53 acre-feet of water from Mile 5.5N, Yolo By-Pass.
g Previously listed as E. L. Wallace

TABLE 182

DIVERSIONS AND ACREAGES IRRIGATED - YOLO BY-PASS (EAST BORROW PIT OF TULE CANAL) - 1955

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. to Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Swanston Land Company (a)	e1.8S	1-16" 1-18"				NO DIVERSION							
Swanston Land Company (a)	e1.1S	1-18" 1-20"				NO DIVERSION							
--GAGING STATION - YOLO BY-PASS BELOW SACRAMENTO BY-PASS--	1.0S												
Swanston Land Company (a)	e0.8S	1-16"				NO DIVERSION							
Swanston Land Company (a)	e0.5S	b 1-12" 1-14"		373	541	706	721	713	156		3260		235
--NORTH LEVEE SACRAMENTO BY-PASS RECORDING GAGE--	0.0												
Swanston Land Company (a)	e1.4N	1-16" 1-20"		435	1328	1200	1846	1924	756		7549	315	637
Ensher, Alexander and Barsoom	2.4N	1-20"			150	531	294	302	55		1338	d 320	
--SACRAMENTO-WOODLAND HIGHWAY--	3.8N												
--SACRAMENTO-WOODLAND RAILROAD BRIDGE--	4.2R												
City of Woodland (e)	e5.5N	1-12"				104	121	11			236	f 390	
--CACHE CREEK--	7.0N												
Hershey Estate (g)	e4.5N	1-16"		39	14						h 53		
--KNIGHTS LANDING RIDGE CUT--	9.6N												
--RECLAMATION DISTRICT 1600 DRAIN PLANT--	10.0N												
Totals			0	[illegible]7	2089	2681	2982	2950	967	0	12436	1025	872
Average cubic feet per second			0	14	[illegible]4	44	48	[illegible]	16	0	26		
Monthly use in per cent of seasonal			0	6.[illegible]	16.9	21.9	24.0	23.7	7.8	0			

* Mileage is given northerly or southerly from North Levee of Sacramento By-Pass. Diversions from East Borrow Pit of Yolo By-Pass are primarily from water diverted through Knights Landing Ridge Cut.
e Asterick indicates that land irrigated is within By-Pass area.
a Formerly listed as Nobart Swanston Estate.
b The 12" unit was a temporary installation during 1955.
g Replaces [illegible]" unit.
d This acreage also received an undetermined amount of well water.
e Previously listed as Lou Ulrich.
f The main source of water for this acreage is the Woodland Sewer Farm.
g New installation in 1955.
h This water was served to [illegible]5 acres of rice listed for Mile 6.3, Knights Landing Ridge Cut.

TABLE 183

DIVERSIONS AND ACREAGES IRRIGATED - LOWER BUTTE CREEK AND BUTTE SLOUGH - 1955

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
	*					Lower Butte Creek							
Reclamation District 1004(a)	3.2R	1-14"					64	63			127	35	
Reclamation District 833	3.3L	1-16"			20	464	683	349			1516	500	
Colusa Shooting Club	4.1L	1-16"					531	151	4	580	b 1266	c 700	
West Butte Farms Company	4.25L	1-18"				200	355	162			717	450	
Reclamation District 1004	4.3R	1-20" 1-24"			927	1013	1036	1030	330		d 4336		130
El Anzar, Incorporated	5.7L	1-12"				156	215				371	150	
Field and Tule	7.5L	1-8" 1-16"				NO DIVERSION							
Reclamation District 1004	11.8R (2.6)	Gravity			1618	2860	1919	620	519		e 7536	f	f
White Mallard Duck Club	11.8R	Gravity				NO DIVERSION							
White Mallard Duck Club	11.8R (0.5)	1-12" 1-16"		89	270	291	560	450	148		g 1808	h 160	h 92
Reclamation District 1004	Opp. 14.4R (0.2)	Gravity		310	155						465	f	f
Murdock Land Company	Opp. 14.4R (0.4)	1-14"		52		122	78	4	71		327	280	
--ORIDLEY ROAD BRIDGE--	15.4												
Butte Basin Gun Clubs	15.6L	Gravity									i	j 4000	
Murdock Land Company	19.3R	1-16"		42	36	94	69	124	16	58	439	120	
--BIGGS-AFTON ROAD BRIDGE--	19.4												
Murdock Land Company	Opp. 19.6R (0.8)	1-14"								63	63	j 70	
Homar and Homar A. Charles k	Opp. 20.7R (0.8)	m 3-16"			1026	1072	986	1156	521	93	4854		n 300
McGowan Brothers	Opp. 20.9R (0.5)	p 1-16"		273	232	225	286	264	5		1285		110
McGowan Brothers	21.0R	1-20"				NO DIVERSION							
E. McPherrin	21.1L	1-16" q 1-20"		655	1350	1713	1865	1649	389		7621		r 854
R. H. Hulen Estate	Opp. 21.4R (1.0)	1-16"		200	375	379	383	201			1538		130
McGowan Brothers	Opp. 22.4R (0.7)	1-16"				NO DIVERSION							
--RICHVALE-BUTTE CITY ROAD BRIDGE--	22.5												
McGowan Brothers	23.0R	s 1-16" 1-20"		884	969	1154	1244	1299	310		5860		500
Harris Lands	23.0L	1-16"	6	55	41	71	46	82	95	26	t 422	95	
McGowan Brothers	Opp. 23.0R (0.75)	1-16"			100		129				229	110	
McGowan Brothers	Opp. 23.5R (1.2)	1-16"				NO DIVERSION							
McGowan Brothers	Opp. 24.0R (0.5)	u 1-16" s 1-20"		651	1112	926	887	856	333		4765		674
Ruth Baldwin and Charles K. Layton	Opp. 25.6L (0.6)	v 2-16"		473	975	978	1311	1155	412		5304		387
--WESTERN CANAL DAM--	30.3												
	**					Butte Slough							
--SACRAMENTO RIVER JUNCTION--	0.0												
Butte Slough Irrigation Company	0.0	Gravity									w	w	w
M. Marty	0.3W	1-10"	18	107	45	86	209	187	51	27	x 730	215	
--BUTTE CREEK--	0.6E												
Mrs. Mamie M. Smith	0.9E	1-7"				NO DIVERSION							
Joe Marty	1.0W	1-6"		13	45	44	54	55	37		y 248	38	

* Mileage on Butte Creek is from its junction with Butte Slough at Mile 0.6E.
** Mileage on Butte Slough is from its junction with Sacramento River at Mile 84.0L.
a New installation in 1955.
b Additional acre-feet diverted: November 22.
c Includes 160 acres reused for duck ponds and 540 acres of duck ponds.
d Includes an undetermined amount of water served to 940 acres of rice and 640 acres of general crops listed for Mile 89.25L, Sacramento River. Additional acre-feet diverted: January 52, November 146, and December 177. The November and December diversion was served to 500 acres of rice land, reused for duck ponds, listed for Mile 89.25L, Sacramento River.
e Additional acre-feet diverted: November 3,000 and December 1,500.
f See plant on Sacramento River, Mile 112.1L.
g Additional acre-feet diverted: January 152 and December 149.
h This acreage was reused for duck ponds.
i Estimated acre-feet diverted: November 3,000 and December 1,500.
j All duck club lands.
k Formerly listed as McGowan Brothers.
m One 16" unit was a temporary installation during 1955.
n Includes 30 acres reused for duck ponds.
p A 16" portable unit was also operated at this location during 1955.
q Previoualy listed as a 24" unit.
r This acreage also received an undetermined amount of well water for flooding only.
s Portable units, a 14" and a 16", were also operated at this location during 1955.
t Additional acre-feet diverted: November 17.
u The 16" unit was installed in 1955.
v One 16" unit was installed in 1955.
w Flow in Butte Slough derived from Butte Creek, is controlled by Outfall Gates at junction with Sacramento River and is thereby retained in Butte Slough to discharge into East and West Borrow Pits of Sutter By-Pass near "Long Bridge." The Outfall Gates are maintained by the Division of Water Resources and are operated cooperatively with the Butte Slough Irrigation Co. See Sutter By-Pass Diversions.
x Additional acre-feet diverted: November 10.
y Additional acre-feet diverted: January 5.

TABLE 183

DIVERSIONS AND ACREAGES IRRIGATED - LOWER BUTTE CREEK AND BUTTE SLOUGH - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
	**					Butte Slough (contd.)							
Mrs. Mamie M. Smith	1.4E	1-8"				100	123	63			286	137	
Fred Tarke	1.9W	1-14"		137			94				231	120	
--MAWSON BRIDGE--	2.1												
C. W. Rawley	2.5W	1-14"				148	180	82			410	315	
J. E. Smith	3.0W	1-10"				39	61	153	3		256	118	
Pearl Clark and Alice Brewer	3.5W	1-10"		48	32	77	63	59	50	16	345	a 118	
P. A. Reische	3.7W	1-10"		15		4	39				58	50	
Granniman and Pieth	4.08W	1-6"			6	2	3	4			15	6	
P. A. Reische	4.1W	1-10"		89		64	37	7	4		201	b 162	
W. J. Hankins	4.8W	1-12"	30	22		66	303	308	15		744	c 308	
P. B. Hensen	5.1W	1-12"	54	60	65	138	53	73	23		c 466	109	
Totals			108	4175	9399	12486	13866	10606	3336	863	54839	8366	3177
Average cubic feet per second			2	70	153	210	226	172	56	14	113		
Monthly use in per cent of seasonal			0.2	7.6	17.1	22.8	25.3	19.3	6.1	1.6			

** Mileage on Butte Slough is from its junction with Sacramento River at Mile 84.0L.
(a) Of this acreage, 49 was double cropped.
(b) Includes 75 acres of C. Reische lands.
(c) The acreage listed for Mile 4.8W also received an undetermined amount of water from Mile 5.1W.

TABLE 184

DIVERSIONS AND ACREAGES IRRIGATED - SUTTER BY-PASS AND SACRAMENTO SLOUGH - 1955

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
	*					West Borrow Pit of Sutter By-Pass **							
--SOUTHERN PACIFIC RAILROAD BRIDGE--	2.5												
C. Fred Holmes	8.0R	1-18"				NO DIVERSION							
--STATE HIGHWAY 24 CAUSEWAY--	12.7												
Sutter Mutual Water Company	17.5R	1-18"				NO DIVERSION							
--SOUTH LEVEE OF TISDALE BY-PASS--	18.9R												
--RECLAMATION DISTRICT 1660 GRAVITY DRAIN--	19.3R												
O. Quist1 and Sons	23.7R	1-16" 1-24"		393	1248	1870	1270	1156	512		6449	735	462
Butte Slough Irrigation Company Limited	25.0R	Gravity	101	339	384	445	520	349	78		2216	a 3365	a 612
Butte Slough Irrigation Company Limited	28.4R	Gravity	434	1253	1253	1872	2261	1922	699		9694	a	a
Fred Tarke	28.6R	b 1-4"		22		31	32	26			111	54	
Frye Brothers	29.0R	1-7"				24	19				43	26	
--STATE HIGHWAY 20 BRIDGE--	29.1												
Fred Tarke	29.2R	1-10"		29		31	16	12			88	c 47	
--SACRAMENTO NORTHERN RAILROAD BRIDGE--	29.25												
	**					East Borrow Pit of Sutter By-Pass **							
R. E. Hughes #8	*0.95S	1-16"			438	488	483	455	58		1922		200
T. H. Richards	0.5S	1-18"			452	785	1054	959	639		3889	184	355
--WILLOW SLOUGH--	0.0												
R. E. Hughes #7	*0.5N	d 1-14" 1-20"		74	185	40	60	72			431	e	e

* Asterick indicates area irrigated is within By-Pass.
** Water used for irrigation in Sutter By-Pass is mainly Feather River return water which enters East and West Borrow Pits via Butte Creek, Butte Slough, and Wadeworth Canal.
* Mileages on West Borrow Pit are given northerly from drainage plant of Reclamation District 1500. Mile 9.15 on West Borrow Pit is opposite Chandler.
** Mileages on East Borrow Pit are given northerly or southerly from Chandler.
a Combined acreage for Mile 25.0R and 28.4R.
b Replaces a 2" unit and a 12" unit.
c Of this acreage, 16 was double cropped.
d The 14" unit was a temporary installation during 1955.

TABLE 184

DIVERSIONS AND ACREAOE IRRIOATED - SUTTER BY-PASS AND SACRAMENTO SLOUOH - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversiona in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
	**		East Borrow Pit of Sutter By-Pass ** (contd.)										
--RECLAMATION BOARD DRAINAGE PLANT #1--	1.4N												
Cliff P. Childers	ð(0.3)	1-16"		312	709	628	592	554			2795		220
Cliff P. Childers	ð(1.29)	1-16"		77	92		138	38			345	300	
E. H. Christenaen and Sons	ð(1.3)	1-16"			242	199	299	204			944	a 600	
E. H. Christenaen and Sons	(1.75)	1-16"				NO DIVERSION							
E. H. Christensen(b)	ð(3.3)	1-12" 1-16"		66	645	606	651	811	228		a 3007		320
E. H. Christensen	ð(4.0)	1-18"		478	804	707	796	771	183		3739		320
Rai Brothers(c)	ð(4.3)	1-12"			29	199	241	228	106		803		d 95
E. H. Christensen(c)	ð(4.35)	1-16"		327	637	557	709	731	160		3121		320
R. E. Hughes #6	*1.5N	e 1-16"		100	729	681	705	777	55		3047	f 500	f 200
R. E. Hughes #5	*2.9N	1-14"		70	359	200	74	435	60		1198	180	160
Leona Hughea	*4.0N	1-14" 1-16"			166		216				382	370	
--STATE HIOHWAY 24 CAUSEWAY--	4.3N												
Leona Hughes	*4.5N	1-14" 1-15"		77	623	639	650	638	203		2830		180
Ira Mulligan	5.7N	1-16"		49	571	715	662	763	275		3035	137	227
R. J. Hughea #2	*5.9N	1-14"			66	190	227	83			566	400	
J. Etcheverry	5.91N	1-14"			977	997	973	966	455		4368	210	210
O. O. Orrick	*6.9N	2-16"		147	785	652	652	660	124		3020	190	245
Ira Mulligan	7.1N	1-16"			88	241	120	14			463	345	
--GILSIZER SLOUOH--	8.0N												
O. O. Orrick(c)	*8.0N (0.45)	1-16"				66	45	58			169	140	
Leona Hughes	*8.0N (0.5)	1-6"				PLANT REMOVED							
Crepps and Middleton	8.4N	1-12" 1-16"				PLANT REMOVED							
Crepps and Middleton	*9.99N	1-15"			145	177	203	228	120	2	875		79
Creppa and Middleton	*10.0N	1-16"							338	97	g 435	h 350	
--RECLAMATION BOARD DRAINAGE PLANT #2--	10.0N												
Crepps and Middleton	¥(0.3)	1-12"			245	346	366	416	259		1632		78
Dettling Brothers	¥(0.9)	1-20"					250	146	109		505	285	
Rodeo Rooster Club	¥(1.5)	1-3"									i	25	
Sutter Extension Water District	¥(2.0)	1-20" 1-30"			704		632	3442	1277		6055	j	j
Ira Mulligan	¥(2.3)	1-10"			127	122	233	218	75		k 775		30
Ira Mulligan	¥(2.5)	1-16"			238	246	411	407	212	9	1523		130
Bridge Investment Company	¥(2.6)	1-16" 1-20"		526	520	710	856	744	363	125	m 3844	693	
Bridge Investment Company	¥(2.65)	1-14" 1-20"		215							215	130	
Bridge Investment Company	¥(3.0)	1-12"		40	104	92	121	151	32	16	n 556	180	
Guisti and DeMartini	¥(3.5)	1-16"				NO DIVERSION							
Percy Davis	¥(4.5)	1-12"	23	83	22	71	144	89	88	73	p 593	120	
Sutter Extension Water District	¥(6.7)	1-20"		98	9		770	1403	154		2434	j	j
Federal Fish and Wildlife Service(q)	*11.5N	1-10"					140	194	99		433	200	
Federal Fish and Wildlife Service(q)	*12.0N	1-6"						18			18	20	

* Asterick indicatea area irrigated is within By-Pasa.

** Water used for irrigation in Sutter By-Pass is mainly Feather River return water which enters East and West Borrow Pits via Butte Creek, Butte Slough, and Wadsworth Canal.

¥¥ Mileages on East Borrow Pit are given northerly or southerly from Chandler.

ð Plant is on the main drainage canal for Drainage Plant #1 that joins East Borrow Pit, Sutter By-Pass at Mile 1.4N. Figure in () indicates distance along drain from East Borrow Pit.

¥ Plant is on drain canal for Drainage Plant #2 that joins East Borrow Pit, Sutter By-Pass at Mile 10.0N. Figure in () indicates distance along drain from East Borrow Pit.

a Three hundred acres listed for Mile ð(1.3) also received an undetermined amount of water from Mile ð(3.3).

b Listed as two plants prior to 1955.

c New installation in 1955.

d This acreage also received an undetermined amount of well water.

e Previously listed as a 14" unit.

f Combined acreage for Miles 0.5N and 1.5N.

g Additional acre-feet diverted: November 32.

h All duck club lands.

i Acre-feet diverted: November 10.

j See plant on Feather River, Mile 38.1R

k Additional acre-feet diverted: January 22.

m Additional acre-feet diverted: November 46.

n Additional acre-feet diverted: November 13.

p Additional acre-feet diverted: November 14.

q Re-installation in 1955 of a plant previously removed.

TABLE 18-

DIVERSIONS AND ACREAGES IRRIGATED - SUTTER BY-PASS AND SACRAMENTO SLOUGH - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
	**		East Borrow Pit of Sutter By-Pass (contd.)										
Federal Fish and Wildlife Service	*16.3N	1-20" Gravity			757	1160	1710	1420	1267	1309	a 7653	b 400	b 400
R. A. Schnabel	*16.4N	1-14"		22	24	26	35	38	15	32	192	c 45	
--WADSWORTH CANAL--	16.5N												
R. A. Schnabel	ψ(1.0L)	1-16"				35	111	26			172	110	
Fred S. Betty	ψ(1.0R)	1-10"		50	44	71	94	41	72	29	401	60	
H. T. and H. D. Brown	ψ(1.35R)	1-10" 1-12"		51	283	276	344	339	102		d 1395	50	e 140
A. H. Muns	ψ(1.36R)	1-14"		87	370	243	252	278	91		d 1321		f 106
Vesper Kellogg	ψ(1.5L)	1-14"		64							64	106	
Albert Thomasen	ψ(1.7R)	1-16"		252	302	309	317	261	83		1524		95
--STATE HIGHWAY 20 BRIDGE--	(2.0)												
Epperson, Kennedy, and Joaquin	ψ(2.5R)	1-10"			83	38	203	191	96		611		g 60
Clara Farrington	ψ(2.5R)	1-10"			167	214					381		g
Youill Joaquin	ψ(3.0L)	1-14"		203	250	262	283	265	113	26	1402		h 95
Gilbert Williamson	ψ(3.6R)	1-10" 1-16"		130	127	132	139	129			657		48
--GAGING STATION - WADSWORTH CANAL AT BUTTE HOUSE ROAD--	(3.6)												
--RECLAMATION BOARD DRAINAGE PLANT #3--	16.7N												
Fred S. Betty	δ(0.9)	1-8"	4	30	35	40	30	45	48	9	241	90	
Fred S. Betty	δ(1.0)	1-10"	2	10	19	16	13	14	11	5	90	15	
Fred S. Betty	δ(1.3)	1-14"		166	365	359	401	505	121		1917		109
Fred S. Betty	δ(1.4)	1-16"				NO DIVERSION							
Mrs. H. C. and C. N. Epperson	δ(1.49)	1-10"		32	52	58	53				i 195	80	
Mrs. H. C. and C. H. Epperson	δ(1.5)	1-20"		241	87	128	127	114	8		705		j 260
H. C. and C. N. Epperson	δ(1.51)	1-16"		330	736	695	688	693	45		3187		j
T. Bihlman(k)	δ(1.85)	1-14"			269	276	404	409	239		m 1597		n 143
Mrs. H. C. and C. H. Epperson(k)	δ(2.65)	1-8"					73				73	50	
Elden Tarke	δ(_.0)	p 1-16"		41	417	402	456	468	161		1945		123
Edward Dean	*16.7N	1-12"			89	61	70	51	46	44	q 361	c 128	
Edward Dean	*16.75N	1-16"				NO DIVERSION							
Frye, Bryant, and Frye	*18.6N	1-20"				NO DIVERSION							
Epperson, Myers, De Witt and Middleton	19.1N	p 1-12"			488	517	431	147			1583	r 663	
T. S. Madden	19.9N	1-16"		205	358	335	361	365	123		1747		161
--STATE HIGHWAY 20 BRIDGE--	19.98N												
--SACRAMENTO NORTHERN RAILROAD BRIDGE--	20.0N												
	*		Sacramento Slough										
C. Fred Holmes	1.4R	1-12"				NO DIVERSION							
Totals			564	6689	18948	20280	24186	25937	9602	1776	107982	11583	6183
Average cubic feet per second			9	112	308	341	393	422	161	29	222		
Monthly use in per cent of seasonal			0.5	6.2	17.6	18.8	22.4	24.0	8.9	1.6			

** Mileage on East Borrow Pit is given northerly or southerly from Chandler.
* Asterick indicates area irrigated is within By-Pase
ψ Plant is on Wadsworth Canal which joins East Borrow Pit, Sutter By-Pass at Mile 16.5N. Figures in () indicates distance along Canal from East Borrow Pit.
δ Plant is on Poodle Creek which joins East Borrow Pit, Sutter By-Pass at Mile 16.7N. Figure in () indicates distance along creek from East Borrow Pit.
* Mileage on Sacramento Slough is given easterly from drainage plant of Reclamation District 1500 which is at head of Slough.
a Additional acre-feet diverted: November 893 and December 446.
b All duck refuge lands.
c This acreage was reused for duck ponds.
d An undetermined amount of water was exchanged between plants at Mile ψ(1.35R) and ψ(1.36R).
e Includes 140 acres of Kennedy lands.
f Includes 16 acres of Kellogg lands.
g Combined acreage for plants at Mile ψ(2.5R).
h Of this acreage 50 was re-flooded in October.
i Two hundred and sixty six acres of Epperson lands listed for Mile 19.1N also received an undetermined amount of water from Mile δ(1.49).
j Combined acreage for Miles δ(1.5) and δ(1.51).
k New installation in 1955.
m Additional acre-feet diverted: November 11 and December 4.
n Includes 6 acres reused for duck ponds.
p Replaces a 14" unit.
q Additional acre-feet diverted: January 5, November 21, and December 9.
r Includes acreage as follows: Middleton 100, Bertha DeWitt 53, M. G. DeWitt 47, LeRoy Myers 47, W. Noll 80, Madden 70, and Epperson 266. Two hundred and sixty six acres of Epperson lands listed for Mile 19.1N also received an undetermined amount of water from 16.7N (1.49E).

TABLE 185

DIVERSIONS AND ACREAGES IRRIGATED - FEATHER RIVER - 1955

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Walter Raymond	0.6R	1-20"					142				142	145	
Walter Raymond	1.0R	1-16"				49	127	13			189	535	
Kipp and Reith	2.2L	1-18"			88	120	84	40	111		443	160	
Walter Raymond	2.6R	2-20"				354	888	387	2	1	1632	780	
John C. Johnston	3.0L	1-10"				8					8	28	
D. R. Toledo and Son(a)	5.2L	1-12"		21	83	92	88	98	92	22	496	90	
White Oak Ranch	5.6L	1-14"		68	124	210	197	153	168	7	927	180	
A. L Haymore	6.44L	1-10"		97	69	64	91	115	142		b 578	140	
M. Scheiber	7.7L	1-10"		32	174	226	163	170	141	58	964	229	
--GAGING STATION - FEATHER RIVER AT NICOLAUS--	c 9.2L												
--NICOLAUS BRIDGE--	9.4												
T. H. Richards	9.75R	1-20"				NO DIVERSION							
--MOUTH OF BEAR RIVER--	12.0L												
Garden Highway Mutual Water Company	13.1R	2-20" 1-24"	245	2077	3318	3067	3208	2791	1018		15724	1562	1489
Farm Lands and/or Plumas Mutual Water Company	17.5L	2-20"	167	861	2135	2263	2515	2322	1035	452	d 11750	e 1904	470
Oswald Water District	21.4R	2-16"	48	415	668	525	483	437	393		2969	f 660	
--GAGING STATION - FEATHER RIVER BELOW SHANGHAI BEND--	23.0R												
Earl R. Huffmaster	25.2R	1-10"		1	74		24	2	9		110	g 150	
--MOUTH OF YUBA RIVER--	27.3L												
--GAGING STATION- FEATHER RIVER AT YUBA CITY--	28.0R												
--10TH STREET HIGHWAY BRIDGE--	28.2												
Thomas, Peroni, Campisi, Perrucci and Chandler(a)	31.2R	1-2½"				1					1	110	
Thomas, Peroni, Campisi, and Perrucci(a)	31.2R	1-4"				11					11	50	
Ray Chandler	32.3R	1-10"				NO DIVERSION							
Henry Everett(a)	33.2R	1-4"				10	9				19	45	
A. A. Sligar and Son	33.2L	h 2-3"					24	44	31		99	i 191	
G. D. Prindiville	33.3R	1-10"	112	75		139	107	77			510	126	
J. L. Sullivan, Jr.	33.9R	1-10"	101	115		85	92	57			450	115	
Sutter Extension Water District	38.1R	1-26" 2-42"	5		179	41	3346	3048	523		7142	j 2364	j 7817
La Finca Orchard	38.5L	k 1-5"				6	1				7	18	
--HONCUT SLOUGH--	43.7L												
Mathews, Sullivan, and Prindiville	*(0.4L)	1-18"	173	165	89	322	375	127			1251	339	
Jesse Frakes	*(1.2L)	1-8"		5	3	15	34	7			64	63	
Ray Washburn	*(1.25L)	1-8"	43	37	55	69	76	65	28	20	m 393	108	
W. R. Madsen	44.0R	1-4"				7	23	14	7		51	55	
W. Earl Willey	44.5R	1-7"				14	14	12	4		44	27	
Herringer Enterprise(n)	46.3L	1-20" 1-24"	78	586	117	288	1767	1959	1063	17	5875	1384	
Manuel Aguiar	47.4L	1-7"				15	19	15	9	2	60	60	
Manuel Aguiar	47.9L	1-12"		46	38	129	121	161	39	14	548	p 265	
Robert S. Biggs	48.0L	1-7"	12	40	12	75	134	95	22		390	q 365	

* Honcut Slough - Plant diverts Feather River water backed into Slough. Mouth of Slough at Mile 43.7L. Distance from Feather River and bank is shown in ().

a New installation in 1955.

b Additional acre-feet diverted: November 25.

c Gaging station moved to this location in 1955.

d Additional acre-feet diverted: November 19.

e This acreage also received an undetermined amount of water from wells and controlled drainage.

f Includes 460 acres which also received an undetermined amount of well water.

g This acreage also received an undetermined amount of well water.

h One 3" unit was installed in 1955.

i Includes 25 acres of Frandrup lands.

j This is the combined acreage for plant at Mile 38.1R, the Sutter extension water district diversion at Mile 58.1R, and the plants on Sutter By-Pass, East Borrow Pit at Mile 10.0N, (2.0), and (6.7). This acreage also received an undetermined amount of controlled drainage water.

k Replaces a 4" unit.

m Additional acre-feet diverted: November 12.

n Formerly listed as Fred Harrington and Brothers.

p Of this acresge, 75 also received an undetermined amount of well water.

q The acreage listed for Mile 48.0L also received an undetermined amount of water from Mile 48.3L.

TABLE 185

DIVERSIONS AND ACREAGES IRRIGATED - FEATHER RIVER - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr	May	June	July	Aug.	Sept.	Oct.		General	Rice
Robert S. Bigga	48.3L	1-10"			6	59	150	75	38		a 328	60	
Bowers Ranch	49.0L	1-8"		8	12	90	53	27	18	20	228	56	
--ORIDLEY BRIDGE - OAGING STATION- FEATHER RIVER NEAR ORIDLEY--	49.7												
Robinson Estate	50.4L	1-14"				7	80	28			115	b 360	
M. A. Pedroza and Sons	50.7L	1-6"	16	23	51	63	64	64	51	10	342	94	
S. T. Machado	50.7R	1-8" 1-10"			37	296	285	112	164		894	191	
Frank E. Norton	51.0R	1-6"				NO DIVERSION							
A. E. Bettencourt	51.0L	1-6"	2	16	30	40	49	31	27	18	213	36	
Steadman Orchards	51.4R	1-10"				NO DIVERSION							
Chester L. Hoar	51.6R	1-6"				26	2				28	48	
S. J. and J. R. Fratus	52.1L	1-10" c 1-12"			285	310	283	272	124		1274	22	80
S. J. and J. R. Fratus	52.2L	1-5"				NO DIVERSION							
Mart Butler	52.5L	1-7"				49	62	47	19	16	d 193	77	
A. K. Johnson	52.7L	1-8"		8	29	53	33	38	18	16	e 195	74	
Hearst Magazines, Incorporated	55.1L	1-14"				NO DIVERSION							
--SUTTER BUTTE CANAL COMPANY DAM--	57.9												
Henry Haselbusch	57.9R	1-9"		2	10	52		23			87	48	
Sutter Butte Canal Company	f 58.1R	Gravity	5853	25938	23464	24663	24855	21039	19210	21638	g 166660	13618	1549
Biggs West Gridley Water District	f 58.1R	Gravity	849	14959	27983	25835	24458	23058	10693	4167	h 132002	4269	8164
Richvale Irrigation District	f 58.1R	Gravity		12230	25309	23566	20912	17825	8053	230	108125	225	11254
Sutter Extension Water District	f 58.1R	Gravity	50	20636	31977	30545	19472	16364	10005	3711	i 132760	J	J
--WESTERN CANAL COMPANY DAM--	61.1												
Western Canal Company	61.2R	Gravity		13916	23268	26253	29042	27009	7894	9322	k 136704	3006	16890
--OROVILLE-RICHVALE HIGHWAY BRIDGE--	62.6												
--OROVILLE CHICO HIGHWAY BRIDGE--	65.0												
--OAGING STATION - FEATHER RIVER NEAR OROVILLE	71.0												
Totals			7754	92377	139687	140112	133952	118221	61151	39741	732995	34432	47713
Average cubic feet per second			126	1552	2272	2355	2178	1923	1028	646	1508		
Monthly use in per cent of seasonal			1.1	12.6	19.1	19.1	18.3	16.1	8.3	5.4			

a The acreage listed for Mile 48.0L also received an undetermined amount of water from Mile 48.3L.
b This acreage also received an undetermined amount of well water.
c The 12" unit was installed in 1955.
d Additional acre-feet diverted: November 9.
e Additional acre-feet diverted: November 4.
f This is a common point of diversion for Sutter Butte Canal Company, Biggs-West Gridley Water District, Richvale Irrigation District, and Sutter Extension Water District.
g Additional acre-feet diverted: November 6,315.
h Additional acre-feet diverted: November 319.
i Additional acre-feet diverted: November 1,438.
j Combined acreage for plant at Mile 38.1R, the Sutter Extension Water District diversion at Mile 58.1R, and the plants on Sutter By-Pass, East Borrow Pit at Mile 10.0N (2.0), and (6.7).
k Additional acre-feet of duck water diverted: November 4,122. Includes 408 acre-feet in September and 9,322 acre-feet in October of duck water.

TABLE 186

DIVERSIONS AND ACREAGES IRRIGATED - YUBA RIVER - 1955

Water User	Mile and Bank above "D" Street	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--HIGHWAY 99E BRIDGE ("D" STREET)--	0.0												
Richard Wilbur	0.9L	1-10"			27	65	73	52			217	98	
--GAGING STATION - YUBA RIVER AT MARYSVILLE (SIMPSON LANE BRIDGE)--	0.9												
Ben Williams	1.4R	1-4"				NO DIVERSION							
W. B. Harrington	1.8R	1-6"			37	29	36	29	15	14	160	44	

TABLE 186

DIVERSIONS AND ACREAGES IRRIGATED - YUBA RIVER - 1955 (contd.)

Water User	Mile and Bank above "D" Street	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
W. B. Harrington	2.2L	1-4" 1-5"			3	20	13	19	13		68	18	
River Bend Ranch	3.0L	1-14"	18	7		111	151	5			292	a 180	
River Bend Ranch	3.1R	1-12"			9	45	34				88	33	
E. O. Rubke	4.1L	2-14"		83	70	87	284	336	116		976	b 230	
E. O. Rubke	4.3L	1-10"		1		76	42	103			222	b	
Di Giorgio Fruit Corporation	4.75L	1-6"	25	105	40	57	52	42	32		353	a 144	
--GAGING STATION - YUBA RIVER NEAR MARYSVILLE--	5.2												
Scott Hendricks	6.2L	1-12"				NO DIVERSION							
--DAGUERRE POINT DAM--	11.0												
Hallwood Irrigation Company	11.0R	Gravity	883	7213	10729	14875	19163	14718	8078	3931	c 79590	5690	1549
Cordua Irrigation District	11.0R	Gravity		6110	9865	11901	11609	11519	5872	4301	d 61177	e 2665	f 3143
Yuba Consolidated Gold Field Company	14.5L	Gravity				NO AGRICULTURAL USE							
--HIGHWAY 20 BRIDGE--	17.1												
--NARROWS DAM--	22.8												
Totals			926	13519	20780	27266	31457	26823	14126	8246	143143	9102	4692
Average cubic feet per second			15	227	338	458	512	436	237	134	295		
Monthly use in per cent of seasonal			0.6	9.4	14.5	19.1	22.0	18.7	9.9	5.8			

a This acreage also received an undetermined amount of well water.
b Combined acreage for Miles 4.1L and 4.3L.
c Additional acre-feet diverted: November 2,918, December 1,027.
d Additional acre-feet diverted: January 1,269, November 3,227, and December 1,726.
e Includes 130 acres outside the district.
f Includes 26 acres outside the district.

TABLE 187

DIVERSIONS AND ACREAGES IRRIGATED - BEAR RIVER - 1955

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--MARYSVILLE-NICOLAUS COUNTY ROAD BRIDGE--	2.7												
--SACRAMENTO NORTHERN RAILROAD BRIDGE--	3.4												
--WESTERN PACIFIC RAILROAD BRIDGE--	3.9												
--TROWBRIDGE-WHEATLAND COUNTY ROAD BRIDGE--	6.8												
Whitney Warren	7.8R	1-6"				NO DIVERSION							
W. H. Gilbert	8.1R	1-6"		8	8	24					40	a 50	
California Packing Corporation	10.7L	1-10"			35	118	112	113	17		395	a 240	
--HIGHWAY 99E BRIDGE--	11.3												
--GAGING STATION - BEAR RIVER NEAR WHEATLAND--	11.3												
--SOUTHERN PACIFIC RAILROAD BRIDGE--	11.35												
Totals			0	8	43	142	112	113	17	0	435	290	0
Average cubic feet per second			0	0	1	2	2	2	0	0	1		
Monthly use in per cent of seasonal			0	1.8	9.9	32.6	25.8	26.0	3.9	0			

a This acreage also received an undetermined amount of well water.

TABLE 188

DIVERSIONS AND ACREAGES IRRIGATED - AMERICAN RIVER - 1955

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--GARDEN HIGHWAY BRIDGE--	0.2												
--HIGHWAY 40 AND 99E BRIDGE (16TH STREET)--	1.9												
--WESTERN PACIFIC RAILROAD BRIDGE--	2.1												
Joe Gomez	2.4L	1-5"	2	13		12	11	19	10		67	9	
North Sacramento Lands Company	2.65R	1-8"				NO DIVERSION							
North Sacramento Lands Company	2.75R	1-5"				6	1	5			12	32	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	3.0												
--OAOINO STATION - AMERICAN RIVER AT SACRAMENTO (H STREET)--	6.0												
E. Clemens Horst Company	6.5R	1-6"			3	48	33				84	a 440	
E. Clemens Horst Company	7.5R	1-8"				53	59				112	a	
J. L. Haas, Incorporated	7.7R	1-4"	1	11		40	52	23		2	129	84	
Del Paso Rock Products Company	8.9R	1-1½"				NO AGRICULTURAL USE							
Walter J. Wissemann	9.0L	1-6"				28	34	27			89	37	
O. L. Browning	9.05R	1-5"				NO DIVERSION							
J. O. and F. P. Dauenhauer	9.2L	1-8"				NO DIVERSION							
Ruth Coleman	9.4L	1-5"				NO DIVERSION							
Del Paso Rock Products Company	10.2R	1-6"		1	15	36	54	24	23		153	50	
Gold Nugget Orchard Company	10.4R	1-5"				9			19		28	17	
Mucke Sand and Gravel Company	11.2L	1-6"	1	2	2	4	7	7	6	4	b 33	24	
J. T. Gore	11.5L	1-4"					30	17	9	9	65	45	
William A. Meyer	11.7L	1-4"				10	14	7			31	25	
J. R. Deterding	15.8R	1-4"		5	9	18	17	21	15	11	96	55	
Carmichael Irrigation District	16.0R	1-6" 3-12"	21	88	235	830	966	848	560	264	c 3812	d 3626	
--GAGING STATION - AMERICAN RIVER AT FAIR OAKS--	19.2												
Totals			25	120	264	1094	1278	998	642	290	4711	4444	
Average cubic feet per second				2	4	18	21	16	11	5	10		
Monthly use in per cent of seasonal			0.5	2.6	5.6	23.2	27.1	21.2	13.6	6.2			

a Combined acreage for Miles 6.5R and 7.5R. This acreage also received an undetermined amount of well water.
b Additional acre-feet diverted: November 2.
c Additional acre-feet diverted: November 13.
d District is suburban land and no segregation of irrigated acreage is available.

TABLE 189

DIVERSIONS AND ACREAGES IRRIGATED - COSUMNES RIVER** - 1955

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--WESTERN PACIFIC RAILROAD BRIDGE--	0.4												
R. L. Deller(a)	0.8R	1-12"			8	47	45	55	13		b 168	45	
R. L. Deller(c)	1.7R	1-10"				3	6	8			17	50	
Kenworthy and Patterson	2.0L	1-30"		50	466	431	446	526	277		2196	290	130
Desmond Ranch (c)	2.8R	1-12"				18					18	d	
A. N. Watson(c)	2.8L	1-8"			65	139	141	111	99		555		e 136
Desmond Ranch(a)	3.1R	1-10"				12	26				38	d 90	
--STATE HIGHWAY 104 BRIDGE--	5.3												
Fred G. Cary	6.0L	1-3"				NO DIVERSION							

** Diversions shown in this table below the McConnel Gaging Station are considered as Delta Uplands Diversions. Tidal effect ceases at about Mile 3.5.
a New installation in 1955.
b Additional acre-feet diverted: November 9.
c Installed prior to 1955. Not previously listed.
d Combined acreage for Miles 2.8R and 3.1R.
e This acreage also received an undetermined amount of water from controlled drainage.

TABLE 189

DIVERSIONS AND ACREAGES IRRIGATED - COSUMNES RIVER** - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
L. G. Kilkeary and H. Trevor	9.8R	1-16"				111	3				a 114	b 765	
Jack Lewis(c)	10.5R	1-6"		28	37	88	7				160	b 95	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	10.6												
--U. S. 50 AND 99 HIGHWAY BRIDGE--	10.7												
--GAGING STATION - COSUMNES RIVER AT McCONNELL--	10.7												
J. C. Carli	14.3R	1-10"			14	49	23				86	40	
J. C. Carli	14.4R	1-10"				NO DIVERSION							
M. F. Larkin	14.6L	1-5"				7					7	25	
--PREEMAN ROAD BRIDGE--	14.9												
Ralph Nix	15.2L	1-8"				NO DIVERSION							
H. A. Saner	15.4R	1-8"				NO DIVERSION							
J. I. Nix	15.8L	1-6"				NO DIVERSION							
--WILTON ROAD BRIDGE--	16.8												
--CENTRAL CALIFORNIA TRACTION COMPANY RAILROAD BRIDGE--	16.8												
George D. Beitzel	18.2R	1-12"		2	3	90	37				132	b 135	
Bradley Ranch(d)	18.9R	1-6"				15	7				22	42	
Bright Estate	20.1R	e 1-10"	44	45	52	448	393				982	b 300	
J. I. Hass, Incorporated	20.9R	1-12"				PLANT REMOVED							
F. Barbero	21.6L	1-6"				19					19	b 30	
Rooney Brothers	23.7R	1-12"				58	41				99	b 120	
Cothrin and Grimahaw(f)	24.4R	1-8"				58	68				126	b 100	
--DILLARD ROAD BRIDGE--	24.8												
P. Westerberg	25.5R	g 1-10"				93	124				h 217	b 125	
A. V. Signorotti	i 25.7R	1-3"		1		1	1	1			4	3	
P. M. Orimshaw(j)	25.9R	1-8"		15		22	19				56	25	
A. V. Signorotti	26.3R	1-5"		9		7	7	1			24	17	
P. Morse Orimahaw	26.4R	1-6"				9	8	6			23	8	
G. C. Johnson	26.5L	k 1-6"				14	13				27	m 190	
G. C. Johnson	27.3L	n 1-5"				89	125	37			251	m	
R. Sartain(d)	27.6R	1-5"				9	13	12	10		44	20	
F. Silva, Jr.	27.8L	1-6" 1-8"			30	113	95	36	27	17	318	b 165	
R. Sartain	28.6R	1-5"				NO DIVERSION							
Schneider Ranch	30.0L	1-8"	10	37	12	122	121	113	102	103	p 620	105	
--STATE HIGHWAY SIXTEEN BRIDGE--	31.3												
A. Granlees	32.6R	1-3"		2		9	9	9	9	9	47	6	
--GRANLEES DAM--	33.0												
Cosumnes River Water District	33.0R	Gravity		250	178	371	930	342	282	207	q 2560	700	
--GAGING STATION - COSUMNES RIVER AT MICHIGAN BAR--	34.3												
Totals			54	439	865	2452	2708	1257	819	336	8930	3491	266
Average cubic feet per second			1	7	14	41	44	20	14	5	18		
Monthly use in per cent of seasonal			0.6	4.9	9.7	27.4	30.3	14.1	9.2	3.8			

** Diversions shown in this table below the McConnell Gaging Station are considered as Delta Uplands Diversions. Tidal effect ceases at about Mile 3.5.

a Additional acre-feet diverted: November 49, December 126.
b This acreage also received an undetermined amount of well water.
c Formerly listed as J. R. Guttridge.
d Installed prior to 1955. Not previously listed.
e Replaces a 12" unit.
f Formerly listed as W. Jared Sheldon.
g Replaces a 14" unit.
h Additional acre-feet diverted: November 29.
i Plant moved from Mile 25.6R in 1955.
j Formerly listed as F. M. and R. M. Grimshaw.
k Replaces a 5" unit.
m Combined acreage for Miles 26.5L and 27.3L. This acreage also received an undetermined amount of well water.
n Replaces a 6" unit.
p Additional acre-feet diverted: November 14.
q This figure is the diversion entering the District under State Highway 16 and includes an undetermined amount of spill to the Cosumnes River at Mile 29.9R, but does not include the spill above Highway 16. Additional acre-feet diverted: November 167 and December 7.

TABLE 190

DIVERSIONS AND ACREAGES IRRIGATED - MOKELUMNE RIVER** - 1955

Water User	Mile and Bank*	Number and Size of Pump	Monthly Diversions In Acre-Feet								Total Diversion Mar.- Oct Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Egbert O. Moree(a)	4.7R	1-12"					60	86	9		155	95	
--FRANKLIN-THORNTON HIGHWAY BRIDGE--	4.9												
--COSUMNES RIVER--	5.0R												
--WESTERN PACIFIC RAILROAD BRIDGE--	5.4												
Manuel Lopes	6.6R	1-12"	4	9	355	400	399	416	202	4	b 1789	187	115
Thornton Farms	6.9R	1-8"			14			10	6		30	13	
--GALT-THORNTON HIGHWAY BRIDGE--	7.0												
Thornton Farms	7.6R	2-12"		38	161	764	844	671	235	50	2763	730	176
Thornton Farms	8.1R	1-12"		20	11	27	28	48	14		148	60	
Albin G. Steffan	8.7R	1-12"	46	55	29	126	160	157	103	50	726	97	
S. and J. Frandy	10.4L	1-12"		34	7	20	27	24	31		143	52	
Albin G. Steffan	10.6R	1-16"	99	294	389	500	549	484	410	138	c 2863	486	
H. C. Braly	15.5R	1-3"	4	5	6	14	14	14	9	8	d 74	10	
A. Taddei	15.6R	1-6"			2	8	25	10	17		e 62	56	
R. J. Linde	16.8R	1-6"			21	19	40	15			95	114	
--GAGING STATION - MOKELUMNE RIVER AT WOODBRIDGE--	19.2												
--SACRAMENTO ROAD BRIDGE--	19.8												
--WOODBRIDGE IRRIGATION DISTRICT DAM--	19.9												
Woodbridge Irrigation District	19.9L	Gravity	1790	7630	11790	12890	17370	16380	12330	9500	f 89680	16511	
LeMoin Beckman	21.1L	1-5"					7				7	13	
LeMoin Beckman	21.3L	1-3"				PLANT REMOVED							
Lewis O. Bridge	21.85R	1-6"			16	29	27	29	16		117	35	
Sidney Nalsey	22.5R	1-5"		8	8	8	9	17	8		58	17	
J. B. Ballantine	22.7L	1-6"	4	8		23	31	33	10		109	43	
L. R. Sanguinetti	23.4L	1-6"			5	2	6	2			15	9	
Nora E. Mumbert	23.4R	1-4"				7	2	2			11	15	
M. M. Bender	23.5R	1-4"				DOMESTIC USE ONLY							
--SOUTHERN PACIFIC RAILROAD BRIDGE--	23.6												
Ben Bechthold	24.0L	1-4"	8	31	1	12	15	9	1	3	g 80	18	
Ben Bechthold(h)	24.05L	1-4"					1	1	1	1	i 4	3	
--HIGHWAY 99 BRIDGE--	24.2												
Litto, Mullen, and Perovich	24.45L	1-5"	1		1	9	4	2	1		18	7	
Lawrence Ranch	24.5L	1-6" 1-10"	25	79	53	30	30	28	14	7	266	137	
S. and M. Miller	24.8L	1-6"		4	7	6	8	12	8	3	48	14	
Kirschermann and Mettler	25.2R	j 1-10"	27	81	15	3	4	10			140	k 70	
M. and N. Palmer	25.5L	m 1-3" 1-4"				17	19	15	7		58	26	
--CENTRAL CALIFORNIA TRACTION COMPANY BRIDGE--	25.6												
Robert N. Lind(n)	26.3L	1-5"					1	5	1		7	p 19	
Richard Wagere(a)	26.5L	1-1½		1	1	1	1	1	1	1	7	3	
Vasco Mencarini	26.9R	1-5"					34	24	1	2	61	60	
Irene Green	27.5L	1-5"	19	22	36	13	24	15			129	q 108	
R. J. Linde	27.6L	1-8"	12	22		2	15	5			56	20	
A. E. Joens	27.9L	1-10"	8	69	111						188	110	

** Diversions shown in this table below the Woodbridge Gaging Station are considered as Delta Uplands Diversions. Left bank diversions into Reclamation District 348 (below Mile 9.8) and right bank diversions into McCormack-Williamson Tract (below Mile 3.5) are not included since these areas are considered to be within the Delta Lowlands. Tidal effect ceases at about Mile 10.5.

* Mile and Bank above New Hope Bridge.

a New installation in 1955.

b Additional acre-feet diverted: February 2, November 5.

c Additional acre-feet diverted: November 38.

d Additional acre-feet diverted: November 4.

e Additional acre-feet diverted: February 13.

f Additional acre-feet diverted: November 3,420.

g Additional acre-feet diverted: November 3.

h Temporary installation for 1955.

i Additional acre-feet diverted: November 1.

j Replaces a 6" unit.

k Of this acreage 56 also receives an undetermined amount of well water.

m The 3" unit was a temporary installation during 1955.

n Installed prior to 1955. Not previously listed.

p This acreage also received an undetermined amount of well water.

q This acreage also received an undetermined amount of water from controlled drainage.

TABLE 190

DIVERSIONS AND ACREAGES IRRIGATED - MOKELUMNE RIVER - 1955 (contd.)

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Frankie G. Dick(a)	28.5L	1-4"				3		[illegible]			6	10	
P. T. Nakagawa, et al.	28.6R	1-6"		4	14	26	37	35	13	2	131	115	
L. J. Peterson	28.9L	1-4"				NO DIVERSION							
W. E. Mehlhaff	29.9R	1-8"	4	6	36	15	7	6	6	4	84	68	
E. Bender	30.0L	1-10"	3	13	13	22	26	26	16	22	b 141	c 30	
--BRUELLA ROAD BRIDGE--	30.0												
V. W. Hoffman and Sons	30.15R	1-5" d 1-8"	6	27	39	58	40	18	13		201	64	
N. H. Davis	30.35R	1-6"	6	29	11	16	15	8	6	1	92	50	
J. J. Schmiedt	30.95L	1-7"				18	45	61	27		151	52	
Leon Kirschenmann and Leonard Preszler, et al.	31.0L	1-8"		150	140	46	37	26	3		402	155	
Rosa D. Soucie	31.7L	1-5"				6	42				48	50	
John Graffigna(e)	31.8R	1-7"			14	20	20	18	10	3	85	32	
Jones Ranch(f)	32.0L	1-6"						10			10	20	
L. J. Peterson	32.5L	1-5"		3	4	15	14	12	11	7	g 66	15	
Red Checker Land Company(h)	32.75R	1-5"		8		15	27	18	4		72	i 108	
C. M. Locke	33.25L	1-10"	27	28	9	71	69	89	22		315	j 130	
Acampo Vineyards	33.45R	1-8"		7	5	12	9	4	3	1	41	10	
Acampo Vineyards	33.6R	1-8"	14	22	15	43	52	39	13		198	110	
Niel C. Locke	33.7L	1-12"	39	90	88	183	239	227	102	20	988	k 323	
John McCarthy(m)	33.75L	1-10"		22	20	45	40	36	39		202	90	
T. and E. Schmierer	33.8R	1-4"	6	10	11	13	12	15	8	6	n 81	15	
Pritam Singh Dhaliwal(p)	34.05R	1-4"		13	10	8	5	3	1		40	q 17	
August Knoll(r)	34.1R	1-4"		44	34	18	7	7	4		114	53	
N. D. and D. D. Knoll	34.3R	1-4"		26	30	9	4	3			72	18	
--COUNTY ROAD BRIDGE--	34.35												
J. B. Ward	34.5R	1-4"	5	6	1	10	9	10	10	9	60	13	
H. C. Russell	34.55L	1-10"	24	62	69	120	125	110	83	60	s 653	70	
Kenneth H. Beckman	34.6R	1-5"	1	2	3	5	5				16	15	
H. C. Russell	34.75L	1-12"	5	43	24	96	135	80	66		449	t 225	
E. R. Thomas	35.15R	1-6"	23	27	51	86	90	79	76	26	n 458	i 180	
E. M. Locke	35.2L	1-8"	3	32	27	43	53	56	35	23	272	73	
George Aberle(u)	35.4L	1-8"	8	72	62	90	108	81	77	42	540	127	
E. R. Thomas	35.5R	1-8"	25		14	35	52	70	28	3	227	50	
C. L. Allen	35.7L	v 1-10"	5	22	4	19	12	37	19	2	120	64	
John S. Coates(w)	35.9L	1-7"			4	19	9	29	15		76	66	
W. S. Montgomery	36.0L	1-12"			13	38	60	71	45	5	232	x 258	
E. R. Thomas	36.2R	1-10"	9	7	26	60	100	101	29	1	333	104	
O. Parker	36.45L	1-12"		5	4	9	10	5	3		36	6	
W. L. Moffat	36.8R	1-8"			12	13	26	23	5		79	51	
J. R. Wiederrich	37.15L	1-10"				65					65	41	
W. L. Moffat	37.45R	1-8"				14	29	33	9		85	80	
W. L. Moffat	37.65L	1-10"				2	54	44	40	7	147	93	
Costa Estate	37.7R	1-12"		12	4	16	24	20	6		82	30	
C. and F. Sanguinetti(y)	38.0L	2-6"		28	34	35	39	52	19		207	68	
C and F. Sanguinetti(z)	38.1L	1-6"		32	10	67	92	112	32		345	62	

* Mile and Bank above New Hope Bridge
a Previously listed as Frank G. Dick.
b Additional acre-feet diverted: November 9.
c Includes 10 acres of A. Knoll lands.
d Previously listed as a 6" unit.
e Installed prior to 1955. Not previously listed.
f New installation in 1955.
g Additional acre-feet diverted: November 2.
h Formerly listed as Langford Ranch (Herbert Buck).
i This acreage also received an undetermined amount of well water.
j This acreage was double cropped.
k Of this acreage, 259 was double cropped.
m Formerly listed as H. C. Russell.
n Additional acre-feet diverted: November 1.
p Formerly listed as C. J. Seibel.
q Includes 3 acres of Mettler Lands.
r Formerly liated as A. and M. Knoll.
s Additional acre-feet diverted: November 21.
t Of this acreage 55 alao received an undetermined amount of well water.
u Formerly listed as J. N. Borroughs.
v Replacea an 8" unit.
w Formerly listed as P. Montgomery.
x Of this acreage, 165 also received an undetermined amount of water from wells.
y Formerly liated as M. C. and H. L. Thompson.
z Formerly listed as J. N. Borroughs.

TABLE 190

DIVERSIONS AND ACREAGES IRRIGATED - MOKELUMNE RIVER - 1955 (contd.)

Water User	Mile and Bank •	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
P. L. and V. A. Stabel	38.3L	1-10"				67	33	35	13	11	159	80	
Gertrude W. Chrisman	38.5L	1-12"	21			62	37	83	54		257	80	
Clemente Estate	39.0L	1-12"	89	227	318	412	467	468	340	306	a 2627	307	
McGee Ranch(b)	39.25L	1-5"	1	2	2	2	2	2	2	1	c 14	2	
R. S. Featherston	39.3R	1-14"				NO DIVERSION							
--HIGHWAY 88 BRIDGE--	39.3												
--GAGING STATION-MOKELUMNE RIVER NEAR CLEMENTS--	39.35												
Totals Average cubic feet per second Monthly use in per cent of seasonal			2371 39 2.1	9491 160 8.6	14214 231 12.8	16977 285 15.3	22072 359 19.9	20790 338 18.7	14742 248 13.3	10329 168 9.3	110986 228	22818	291

• Mile and Bank above New Hope Bridge.
a Additional acre-feet diverted: November 125.
b Installed prior to 1955. Not previously listed.
c Additional acre-feet diverted: November 1.

TABLE 191

DIVERSIONS AND ACREAGES IRRIGATED - CALAVERAS RIVER•• - 1955

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Inman Realty Company(a)	1.8L	1-12"		7	1	1	9	7	6	4	35	2	
Inman Realty Company(a)	1.9L	1-6"				NO DIVERSION							
E. D. Larson(a)	2.0L					NO DIVERSION							
E. A. and E. R. Anderson(a)	2.2L	1-4"				2	2	2	2		8	5	
Weierahauser, Ghiorzo, and Piccardo(a)	2.5R	1-12"		59	15	67	84	93	41	22	381	79	
John Santa Maria(a)	2.9L	1-4"				1	4	3	3	1	b 12	c 12	
Ralph Panella(a)	2.9R	1-12"				43	14	9			66	15	
--PACIFIC AVENUE BRIDGE--	3.7												
Charles M. Weber	4.4R	4-6"				52	23	54	45		174	d 85	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	5.3												
--STOCKTON DIVERTING CANAL--	5.4L												
Roy Moresco	5.7L	e 1-14"			3	12	11	10			36	c 49	
Claude Moresco	6.0L	1-5"			17	12	12	16			57	c 30	
--U. S. 50 AND 99 HIGHWAY BRIDGE--	6.8												
--CENTRAL CALIFORNIA TRACTION COMPANY RAILROAD BRIDGE--	7.9												
--GAGING STATION - CALAVERAS RIVER NEAR STOCKTON--(f)	7.9												
A. V. Lagorio	8.5L	1-6"			15	16	13	7			51	c 23	
--SOLARI ROAD BRIDGE--	8.8												
E. Leonardini	9.1R	1-4"		4	8	16	11	8			47	c 26	
Uyeda Brothers	9.9L	1-6"			8	30	35	9			82	c 62	
Rugani Brothers	9.9R	1-6"			9	25	14				48	c 54	
E. and R. Sanguinetti	10.2R	1-8"			7	12	20	10			49	c 25	
--ALPINE ROAD BRIDGE--	10.6												
John B. Garibaldi	11.0L	1-5"			3	22	33	12			70	c 45	
John Arata	11.2L	1-5"				17	7				24	c 11	

•• Diversions shown in this table below the Stockton Gaging Station are considered as Delta Uplands Diversions. Right bank diversions below Mile 2.0 and left bank diversions below Mile 0.7 are not included since they serve areas that are considered to be within the Delta Lowlands. Tidal effect ceases at about Mile 5.0.
e Installed prior to 1955. Not previously listed.
b Additional acre-feet diverted: November 1.
c This acreage also received an undetermined amount of well water.
d Of this acreage 25 also received an undetermined amount of water from controlled drainage and from Woodbridge Irrigation District.
e Replaces a 4" unit.
f Station moved from Mile 8.9 in 1955.

TABLE 191

DIVERSIONS AND ACREAGES IRRIGATED - CALAVERAS RIVER - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.-Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Irene Saccone	11.4L	1-4"				16	21	16			53	a 30	
Frank Solari	11.4R	1-6"			19	33	45	7			104	a 115	
--PEZZI DAM--	11.8												
Julia Pezzi and Sons	11.8R	Gravity			37	73	59	60			229	a 65	
Julia Pezzi and Sons	11.82L	Gravity			10	9	10				29	b	
Julia Pezzi and Sons	11.85L	Gravity			19	21	20				60	a,b 30	
A. Navone	11.85R	Gravity				NO DIVERSION							
Julia Pezzi and Sons	11.95L	Gravity			4	9	10	6			29	b	
A. Navone	11.95R	Gravity			5	7	7	3			22	a 9	
Julia Pezzi and Sons	12.0L	Gravity			10	12	12	10			44	c	
Julia Pezzi and Sons	12.05L	Gravity			13	25	26	13			77	a,c 30	
L. Freggiaro and Son	12.05R	Gravity				NO DIVERSION							
Julia Pezzi and Sons	12.1L	Gravity			2	6	6	3			17	c	
Julia Pezzi and Sons	12.15L	Gravity			7	8	8	4			27	a 22	
--MURPHY DAM--	12.3												
A. Sciutti	12.3L	Gravity				4	1	4			9	a 20	
L. Freggiaro and Son	12.3R	Gravity			7	8	17	2			34	a 20	
Tony Pastore	12.35L	Gravity				NO DIVERSION							
C. Freggiaro and Son	12.39R	Gravity				4	4				8	a 4	
G. Freggiaro and Son	12.40R	Gravity				NO DIVERSION							
G. Freggiaro and Son	12.41R	Gravity				12	12	4			28	a 15	
C. Bava and Son(d)	12.42R	Gravity		67	101	135	101	68			472	a 96	
Vic Freggiaro(e)	12.43R	Gravity					5				5	a,f 7	
Vic Freggiaro(e)	12.45R	Gravity					5				5	f	
Vic Freggiaro(e)	12.5R	Gravity			10	14	15	3			42	a 18	
Tony Pastore	12.5L	Gravity				2	5	5			12	g	
Tony Pastore	12.6L	Gravity				4	8	8			20	a,g 19	
Vic Freggiaro	12.6R	Gravity				12	18	6			36	a 12	
--STATE HIGHWAY 88 BRIDGE--	12.7												
Tony Pastore	12.8L	Gravity				1	1	1			3	a 3	
Percy Pope	12.9R	Gravity					15				15	a 32	
Ed O. Brandstad	13.6R	1-6"			22	32	41	10			105	a 60	
William Thrush	13.9L	1-6"					84	14			98	a 97	
N. Tassano	14.0R	1-4"		23	22	19	33	28			125	a 30	
Henry Poppiano(e)	14.1L	1-5"			3	10	12	9			34	a 78	
J. Schiaffini	14.4R	1-4"		3	32	17	15	3			70	a 20	
Grattone and Bava	14.5R	1-12"			96	198	147	117			558	a 191	
L. and R. DeVincenzi	14.8R	h 1-6"			3	78	59	34			174	a 125	
Dave Dave V. Sanguinetti	15.1L	1-5"			7	27	38	20			92	a 56	
A. Girardi	15.4R	1-12"			14	44	77	19			154	a,i 160	
J. H. Tone	15.7L	1-10"		5	9	67	78	16			175	a 90	
--JACK TONE ROAD BRIDGE--	15.8												
John Plotz	16.0R	1-5"			10	36	19	8			73	a 38	
L. A. Cademartori	16.2L	1-5"			20	42	50	27			139	a 62	
Joe Phillips	16.5L	1-6"				57	46				103	a 85	
C. Paoletti	16.6L	1-5"			3	15	8	6			32	a 33	
Reno Paoletti(J)	16.7L	1-4"					17	2			19	a 18	
Lawrence Zolezzi	16.8L	1-6"		16	23	36	30	19			124	a 64	
John Boggiano	17.3L	1-6"				NO DIVERSION							

a This acreage also received an undetermined amount of well water.
b Combined acreage for Miles 11.82L, 11.85L, and 11.95L.
c Combined acreage for Miles 12.0L, 12.05L, and 12.1L.
d Formerly listed as H. B. Murphy and C. Bava and Son.
e Installed prior to 1955. Not previously listed.
f Combined acreages for Miles 12.43R and 12.45R.
g Combined acreage for Miles 12.5L and 12.6L
h Previously listed as a 16" unit.
i One hundred and thirty three acres listed for Mile 15.4R also received an undetermined amount of water from Mile 21.6R (6.1L).
j New installation in 1955.

TABLE 191

DIVERSIONS AND ACREAGES IRRIGATED - CALAVERAS RIVER - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--TULLY ROAD BRIDGE--	17.8												
Steve Solari	18.4L	1-8"		5	103	98	117	39			362	a 300	
Joe Landoni	19.3R	1-5"			2	22	22	15			61	a 38	
E. F. Messick	19.8R	1-5"			1	2	1	1			5	e 4	
B. E. Stagnaro(b)	19.8L	c 1-8"		7	3	12	18	5			45	a 18	
L. Vaccarezza	20.1L	1-5"		6	10	16	23	10			d 65	a 30	
Bethel Guernsey	20.3L	1-10"			8	23	25	5			61	a,d 57	
G. Pacini	20.4L	1-3"			2	4	7	3			16	a 10	
Frank G. Rossi	20.6L	1-5"			6	6	7	6			25	a 20	
Guernsey Ranch	20.9R	1-8"			26	61	29	36			152	a 95	
F. and M. Arboco(e)	21.0L	1-4"			9	57	20	15			f 101	a 38	
Frank Giannecchini	21.01L	1-5"			3		6	6			15	a,f 40	
--CLEMENTS ROAD BRIDGE AND DAM--	21.1												
E. W. Marciano and D. Canepa(g)	21.1L	Gravity				139	167	69			375	a 190	
Albert Metzler	21.11L	Gravity		12	19	42	60	18			151	a 60	
Mailand Ferrill	21.3L	1-5"				10	6	7			23	a 25	
D. Giordano	21.4L	1-4"		1	3	5	9	2			20	a 8	
Domonick Figone	21.5L	1-5"				10	7	8			25	a 30	
--NORTH SLOUGH--	21.6R												
--NORTH SLOUGH CONTROL GATES--	*(0.0)												
F. Harrison	*(1.3L)	1-4"				4	6	2			12	a 13	
L. Robinson	*(1.3R)	1-3"		1	2	1	2	1			7	a 10	
S. Filippone	*(1.8L)	1-4"				11	11	5			27	h 14	
Webster Ranch	*(1.81L)	1-12"			32	37	58	31			158	i 212	
W. G. Fisher	*(4.1L)	c 1-9"				28	59	15			102	a 75	
--TULLY ROAD BRIDGE--	*(4.2)												
George and Charlea Hansen	*(4.3L)	1-4"			3						3	a 7	
J. H. Tone	*(6.0R)	1-10"	2			64	48	32	21		167	a 146	
A. Giradi	*(6.1L)	1-16"			7	84	89	19			j 199	a 60	
Lyone Brothers	*(6.6R)	1-10"				103	30	49	23		205	a 175	
A. G. Steltzner	*(7.3R)	1-8"			75	154	129	40			398	a 22	a 94
J. W. Hannah, Jr.	*(7.8L)	k 1-6" 1-8"			1	127	113	25			266	a 80	
--STATE HIGHWAY 88 BRIDGE--	*(8.1)												
A. G. Steltzner	*(8.1R)	1-6"				92	126	45			263		a 80
W. C. Leffler	*(11.5L)	1-10"			117	269	296	99			781	e 80	a 34
Webster Ranch	21.7R	1-8"		6	54	94	91	52			297	a 129	
Ralph Houston	21.9R	1-8"		24	17	41	47	4			133	a 82	
Andrew Cuneo	22.0L	1-12"		71	161		93	27			352	a 163	
Mick Genetti	22.1L	1-4"		5	7	10	16	6			44	a 19	
Joe DeMartini	22.2R	1-8"				48	70	23			141	a 78	
Carroll and Anderson	22.3L	1-8"		10	26	36	60	34			166	a 76	
John Boggiano	22.4R	1-10"			4	25	44	10			83	a 70	
Caeser DeMartini	22.7R	1-12"		14	28	32	44	20			138	a 142	
Louis Taesano	22.9L	1-8"		17	6	20	21	7			71	a 75	
Frank DeBenedetti	23.1L	1-7"			3	15	9	4			31	d 38	
Fred Podesta	24.3L	1-12"			3	29	59	46			137	m	
Fred Podesta	24.4L	1-12"			10	90	181	136			417	a,m 450	
--STATE HIGHWAY 8 BRIDGE--	25.2												

* North Slough - North Slough diverts from Calaveras River at Mile 21.6R. Distance from Calaveras River and Bank is shown in ().

a This acreage also received an undetermined amount of well water.

b Formerly listed as W. E. Lynch.

c Replaces a 4" unit.

d Twenty two acres listed for Mile 20.3L also received an undetermined amount of water from Mile 20.1L.

e Formerly listed as O. Arboco.

f The acreage listed for Mile 21.01L also received an undetermined amount of water from Mile 21.0L.

g Formerly listed as E. W. Marciano, D. Canepa, and C. DeMartini.

h Includes 8 acres which also received an undetermined amount of well water.

i Includes 132 acres which also received an undetermined amount of well water.

j 133 acres listed for Mile 15.4R also received an undetermined amount of water from Mile 21.8R (6.1L).

k The 6" unit was a temporary installation during 1955.

m Combined acreage for Mile 24.3L and 24.4L.

TABLE 191

DIVERSIONS AND ACREAGES IRRIGATED - CALAVERAS RIVER - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--GAGING STATION - CALAVERAS RIVER AT BELLOTA--	25.25												
--CALAVERAS RIVER-MORMON SLOUGH CONTROL GATES--	25.28												
John Armanion and Sons(a)	25.3R	1-10"		7	53	64	96	66			286	b 118	
D. Creary	25.3L	1-3"			1	1	1				3	b 2	
--MORMON SLOUGH--	25.3L												
--GAGING STATION - MORMON SLOUGH AT BELLOTA--	*(0.05)												
--FARMINGTON - BELLOTA COUNTY ROAD BRIDGE--	*(0.2)												
J. G. Watkins	*(0.3R)	1-8"				47	21				68	b 60	
Angelo Solari	*(0.5L)	1-8"	11	9	16	44	34	11			125	b 64	
Fred Casella	*(0.9L)	1-6"			41	33	22	24			120	b 89	
John, Louis, and Mario Boggiano(c)	*(1.4R)	1-12"		6	64	165	164	60			459	b 302	
Sam Motoike	*(1.5L)	1-8"				13	24	2			39	b 30	
Raymond Motoike	*(1.7L)	1-6"				11	25	13			49	b 35	
E. Marugliano	*(2.0R)	1-7"			4	20	27	12			63	b 42	
C. and P. Sanguinetti	*(2.0L)	1-8"			1	49	73	27			150	b 85	
J. B. Ryburn(d)	*(2.5L)	1-10"			39	33	62	21			155	b 114	
--PINE ROAD BRIDGE--	*(2.7)												
Caeser DeMartini	*(3.4R)	1-10"		4	15	19	23	13			74	48	
John Avansino	*(3.5L)	1-5"				NO DIVERSION							
Louis J. Lagorio	*(3.6R)	1-6"		3	17	41	52	18			131	b 160	
Ray Lagorio(e)	*(3.7R)	1-8"		22		21	24	13			80	b 40	
P. W. Leonardini	*(4.1L)	1-7"			2	23	26	6			57	b 100	
Bertha E. Case	*(4.4L)	1-8"	36	8	18	8	12	8			90	b 60	
Nick Bonomo(d)	*(5.5L)	1-10"		26	12	42	38	5			123	b 79	
John A. Lagorio	*(5.8L)	1-7"		4	2	26	19	4			55	b 40	
C. and F. Sanguinetti	*(6.1L)	1-6"		3	8	57	19	24			111	b 80	
S. Piazza(f)	*(6.2R)	1-6"			3	10	21	11			45	b 33	
John Ratto(d)	*(6.7R)	1-5"					2	1			3	b 25	
Dondero Bros.(d)	*(6.9R)	1-8"			1	18	12	7			38	b 33	
A. and R. Lagorio	*(6.9L)	1-8"			20	49	53	13			135	b 94	
Prado Brothers(d)	*(7.2R)	1-6"		5	4	19	23	9			60	b 34	
A. and R. Lagorio	*(7.2L)	1-8"			9	20	47	20			96	b 102	
Mapes Brothers	*(7.5R)	g 1-6"	1	12	29	46	72	17			177	b 70	
D. Paoletti and Son	*(7.8R)	1-6"		7	20	10	20	2			59	b 40	
--COPPEROPOLIS ROAD BRIDGE--	*(7.8)												
A. Mignacco(d)	*(10.0L)	1-8"			9	37	46	16			108	b 64	
E. M. Walker(d)	*(10.0R)	1-5"					6	4			10	b 32	
M. Lavaggi(d)	*(10.3L)	1-8"			12	44	42	25			123	b 64	
Ray Duarte(e)	*(10.8R)	1-7"				21	82	13			116	b 110	
Ray Duarte(d)	*(11.0L)	1-8"				54	26	5			85	b 80	
Dick Wilma	*(11.7R)	1-5"				NO DIVERSION							
Frank C. Raffel	*(11.9L)	1-6"			23	45	17	18	10		113	b 85	
Joseph Caffese and Sons	*(12.8R)	1-7"				11	16	6			33	b 26	
--END OF MORMON SLOUGH - BEGINNING OF STOCKTON DIVERTING CANAL--	*(13.0)												
Homer D. Riddle	**(13.3R)	1-6"			6	40	48	12			106	b 134	

* Mormon Slough - Mormon Slough diverts from Calaveras River at Mile 25.3L, and rejoins the river through Stockton Diverting Canal. Distance from Calaveras River and Bank is shown in ().

** Stockton Diverting Canal - Stockton Diverting Canal diverts from Mormon Slough at Mile *(13.0) and rejoins the Calaveras River at Mile 5.4L. Distance from Calaveras River and Bank is shown in ().

a Formerly listed as Armanino Brothers.
b This acreage also received an undetermined amount of well water.
c Formerly listed as Linden Orchard.
d New installation in 1955.
e Installed prior to 1955. Not previously listed.
f Formerly listed as P. Paoletti.
g Replaced a 3" unit in July 1955.

TABLE 191

DIVERSIONS AND ACREAGES IRRIGATED - CALAVERAS RIVER - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Homer D. Riddle	••(13.7R)	1-6"			15	32	19	2			68	a 77	
--STATE HIGHWAY 8 BRIDGE--	••(14.9)												
Budiselich and Boggiano Brothers	••(15.7R)	2-12"			297	370	266	220			1153	a 186	a 50
--U. S. 50 AND 99 HIGHWAY (FREEWAY) BRIDGE--	••(16.0)												
--GAGING STATION - STOCKTON DIVERTING CANAL AT STOCKTON--	••(16.2)												
R. Moresco	••(16.2R)	1-12"				PLANT REMOVED							
--U. S. 50 AND 99 HIGHWAY BRIDGE--	••(17.2)												
Albert A. Anderson	25.5L	1-12"				147	129				276	o 115	
L. F. Grimsley	25.9L	1-16"			67	55	104				226	a 191	
Vignolo and Pallavicino	26.3R	1-10"	34	64	63	97	126	70			454	a 117	
Field Brothers	26.8L	1-6"		4	78	65	53	58			258	a 109	
McGurk Ranch	26.8R	1-8"		15	30	42	70	60			217	a 140	
Saverio Nogare	27.2R	1-12"		5	23	52	49	31			160	a 125	
Saverio Nogare	27.5L	1-10"				139	53	42			234	a 107	
E. E. Cady	28.3L	1-6"		3	12	33	27	33			108	b 76	
R. T. and A. V. Lagorio	28.9L	1-10"		6		7	21	24			58	a 50	
Garavano and Maffeo	29.0L	1-6"	15	9		24	38				86	a 50	
O. R. Shelley	29.2R	1-6"					6	10	2		18	a,c 78	
O. R. Shelley	29.3L	1-10"		2	17	45	60	74			c 198	a 84	
M. N. Yocum	29.4L	1-8"	2	4	9	44	56	6			121	a 105	
Kenneth G. Watkins(d)	30.1R	1-10"		48	118	208	182	158			714	a 130	
--BELLOTA RIVER ROAD BRIDGE--	30.4												
L. and D. Hoag	30.6R	1-14"		3	33	58	83	108			285	a 156	
Lynn Barnett	30.7R	1-7"			7	17	5	12			41	a 26	
Lois E. Nunt	31.1R	1-6"				29	14	10			53	37	
S. M. Gregory	31.3R	1-8"		10	11	36	37	34	16	5	149	a,e 125	
S. M. Gregory	31.6R	1-6"				21	7	8			36	e	
Eva Hunt	32.5R	1-5"		2	4	9	10	9	9	7	f 50	15	
Eva Hunt	32.6L	1-6"			30	10	55	58	27		180	55	
--GAGING STATION - CALAVERAS RIVER AT JENNY LIND--	36.9												
Totals			101	654	2588	6023	6468	3305	205	39	19383	10184	258
Average cubic feet per second			2	11	42	101	105	54	3	1	40		
Monthly use in per cent of seasonal			0.5	3.4	13.3	31.1	33.4	17.0	1.1	0.2			

•• Stockton Diverting Canal - Stockton Diverting Canal diverts from Mormon Slough at Mile •(13.0) and rejoins the Calaveras River at Mile 5.4L. Distance from Calaveras River and Bank is shown in ().

a This acreage also received an undetermined amount of well water.

b Includes 38 acres which also received an undetermined amount of well water.

c The acreage listed for Mile 29.2R also received an undetermined amount of water from Mile 29.3L.

d Formerly listed as A. O. Watkins.

e Combined acreage for Miles 31.3R and 31.6R.

f Additional acre-feet diverted: November 1.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
OLD RIVER	x												
--CONTRA COSTA CANAL--	30.5L												
John A. Bettencourt a	b 30.5L	1-18"		201	63	160	224	174	138	40	1000	c 259	
Augustus Sarija	d 36.5L	2-6"	11	12	38	44	42	57	46	18	e 268	82	

x Mileage along Old San Joaquin River from mouth of San Joaquin River 4½ miles below Antioch.

a Installed prior to 1955. Not previously listed.

b Rock Slough joins Old San Joaquin River at Mile 30.5L. Pumping plant is located on channel which joins Rock Slough.

c Includes 27 acres of H. H. Mercer lands.

d Indian Slough joins Old San Joaquin River at Mile 36.5L. Pumping plant is located on intake canal which joins Indian Slough.

e Additional acre-feet diverted: November 2.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
OLD RIVER (contd.)	*												
East Contra Costa Irrigation District	a 36.5L	1-18" b 3-24" 2-30"	226	5174	4773	7602	7314	6504	2953	607	35153	c 15374	
--STATE HIGHWAY 4 BRIDGE--	38.8												
Byron-Bethany Irrigation District	d 40.9L	e 1-20" 1-24" 1-30"	1025	3785	4639	6744	6318	6299	4957	2465	f 36232	g 10385	
--CLIFTON COURT FERRY--	43.8												
--DELTA-MENDOTA CANAL--	44.6L												
M. R. Furtado	h 44.6L	1-14"	117	159	188	258	254	272	205	67	i 1520	286	
Emil Hoefer	44.7L	j 1-5"			4	8	6	7			25	k 14	
William M. Ralph	45.3L	1-12"	73	109	195	202	213	205	165	137	1299	307	
George Covert	m 47.2L	1-16"	124	203	292	447	450	433	262	176	n 2387	p 385	
Lucio J. Coata	m 47.2L	1-14"	27	121	82	246	172	225	262	165	q 1300	p 250	
Johnnie L. Costa	r 47.65L	1-8"	8	16	43	55	48	48	36	22	s 276	80	
West Side Irrigation District	r 47.65L	7-15"	2620	5028	4919	6228	6611	6299	4733	1562	38000	t 10497	
Vance Brown	48.4L	1-12"	28	47	53	119	87	89	59	62	544	155	
Naglee Burke Irrigation District	49.5L	1-4"		1	2	4	2	2	2	1	14	6	
Naglee Burke Irrigation District	50.4L	1-16" 1-18"	220	1105	1242	1956	1898	1989	1452	512	10374	u 2491	
Freemont Irrigation Association	50.9L	1-16"	57	121	207	359	389	320	171		v 1624	w 702	
Joe M. Freitas	51.0L	1-8"		15			30	20			65	x 36	
Attilio Casserini	51.2L	1-10"			20	13	13	12			58	36	
Excelsior Ranch #2	52.4L	1-10"		45	17	32	19	51	31	2	197	y 115	
A. L. Galli	53.0L	1-8"		23	24	42	28	39	40	27	223	57	
--RECORDING GAGE--	53.0												
--MOUTH OF TOM PAINE SLOUGH--	54.3L												
Totals			4536	16165	16801	24519	24118	23045	15512	5863	130559	41517	
Average cubic feet per second			76	263	282	399	405	387	252	99	269		
TOM PAINE SLOUGH	*												
Independent Mutual Water Corp. & Co.	0.7S	2-18"	96	276	373	485	402	924	405	23	z 2984	aa 1076	
Independent Mutual Water Corp. & Co.	1.5S	1-18"	6	48		109	50	190	42	5	450	227	
--HOLLY SUGAR CORPORATION DREDGE CUT--	2.1S												
George J. Laka	**(0.5W)	1-10"					89				89	170	
Holly Sugar Corporation	**(1.2W)	1-12" 1-14"		388	507	472	535	530	441	419	ab 3292	ac 712	
--RECORDING GAGE--	2.2S												
Pescadera Reclamation District 2058 (#1)	2.9S	1-12"	101	111	123	206	230	243	191	85	1290	243	
Pescadera Reclamation District 2058 (#3)	6.3S	1-12" 1-20" 1-24"	969	1097	1390	2008	2160	2330	1926	607	12487	ad 2527	
Pescadero Reclamation District 2058 (#5)	8.3S	1-12"	107	141	159	331	292	321	204	71	ae 1626	352	
Pescadera Reclamation District 2058 (#5A)	9.0S	1-12"	11	78	73	174	167	185	111	7	806	211	

* Mileage along Old San Joaquin River from mouth of San Joaquin River 4½ miles below Antioch.

* Mileage along Tom Paine Slough from its mouth at Mile 54.3L on Old San Joaquin River.

** Holly Sugar Corporation dredger cut joins Tom Paine Slough at Mile 2.1S. Distance along dredge cut and bank are shown in ().

a Indian Slough joins Old San Joaquin River at Mile 36.5L. Pumping plant is located on intake canal which joins Indian Slough.

b A 24" unit replaced one 18" unit.

c This acreage also received 3,696 acre-feet of well water.

d Italian Slough joins the Old San Joaquin at Mile 40.9L. Pumping plant is located on intake canal which joins Italian Slough.

e The 20" unit was installed in 1955.

f Additional acre-feet diverted: November 364.

g Of this acreage, 134 was double cropped.

h Plant is located on intake canal which joins the Old San Joaquin River at this mile.

i Additional acre-feet diverted: December 3.

j Formerly listed as a 6" unit.

k Includes 4 acres of Hammer lands.

m Plant is located on Mountain House Creek which joins the Old San Joaquin River at this mile.

n Additional acre-feet diverted: November 12.

p This acreage also received an undetermined amount of water from Mountain House Creek.

q Additional acre-feet diverted: November 25.

r Plant is located on intake canal which joins the Old San Joaquin River at this mile.

s Additional acre-feet diverted: November 9.

t Of this acreage, 384 was double cropped.

u Includes 20 acres of Tracy Clover District land.

v Additional acre-feet diverted: January 115 and February 1.

w Includes 8 acres of Tracy Clover District land.

x This acreage was double cropped.

y Of this acreage, 80 was double cropped.

z Additional acre-feet diverted: November 6.

aa Of this acreage, 76 was double cropped.

ab Additional acre-feet diverted: November 420 and December 203. Includes an undetermined amount of water used for industrial purposes.

ac Of this acreage, 126 was double cropped.

ad Of this acreage, 50 was double cropped.

ae Additional acre-feet diverted: November 39.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
TOM PAINE SLOUGH (contd.)	•												
Totals Average cubic feet per second			1290 22	2139 35	2625 44	3785 62	3925 66	3723 79	3320 54	1217 20	23024 4[illegible]	5518	0
SAN JOAQUIN RIVER•• (Stockton to Vernalis)	•												
--STATE HIGHWAY 4 BRIDGE--	45.[illegible]												
--FRENCH CAMP SLOUGH--	45.9R												
Carolyn Weston	46.1R	1-4"				NO DIVERSION							
Carolyn Weston	46.2R	1-6"				1	39	28	15	20	a 103	50	
Carolyn Weston	46.3R	1-12"	42	82	143	35	130	152	63	101	748	215	
Ivy Ranney	46.65R	1-10"			11	68	107	59	47	29	321	80	
Frank West	46.85R	1-10"	73	17	81	85	129	76	100	9	b 571	147	
F. Asano	47.2R	1-6"	2	3	4	9	27	9	6	2	a 62	c 22	
Wolfinger Brothers	47.3R	1-10"	1		20	38	17	31	14		121	50	
C. C. Long	47.55R	1-10"	12		17	17	25	51	121		243	d 183	
Waldo C. Haack	48.0R	1-14"	34	45	98	158	144	150	81		710	e 370	
Chow L. Young	48.3R	1-4½"		2	4	6	12	10	7	2	a 43	f 23	
Chow L. Young	48.5R	1-3"				PLANT REMOVED							
Joe Calcagno	48.5R	1-6"	43	20	31	32	68	65	27		286	90	
C. J. Pregno	48.55R	1-6"		5		7	20	20	9		61	[illegible]	
John Calcagno	48.66R	1-12"		14	27	85	65	82	64		337	g 10[illegible]	
Minna M. and Ema J. C. Ott	49.0R	1-12"	14	11	21	60	84	61	63	56	h 370	75	
Herbert Spangenberg and S. B. Chapman	49.3R	1-14"	34	50	56	113	136	111	106	26	632	i 225	
Herbert Spangenberg and S. B. Chapman	49.5R	1-12"	14	40	37	69	99	73	60		392	i	
A. A. Rodgers	50.1R	1-10"	16	21	32	52	55	54	47	21	j 298	80	
--BRANDT BRIDGE--	50.2												
A. Hirata	50.4R	1-10"		27	21	40	48	47	40	6	229	k 85	
K. R. and F. Watanabe	50.6R	1-6"	10	14	22	24	37	13	20	18	158	54	
D. Toscano	50.8R	1-6"	3	10	17	27	27	25	14	7	m 130	40	
Pastorino Brothers	50.9R	1-12"	52	43	62	76	73	119	102	27	n 554	156	
Pastorino Brothers	51.0R	1-6" 1-10"				NO DIVERSION							
Felipe Esteban	51.2R	1-12"	42	3	7	37	60	66	53		268	p 99	
J. Burchell	q 51.6R	1-10"			78	73	68	90	60		369	90	
G. Santini	52.4R	1-5"			1	4	7	5	2		19	17	
D. J. Macedo	52.65R	1-10"			50	81	43	68	37		279	84	
J. Widmer	53.2R	r 1-16"	83	82	174	213	247	174	205	34	s 1212	394	
William Nishimura	53.4R	1-8"			18	23	22	20	11	1	95	45	
J. Widmer t	53.45R	1-12"		1	3	1	1	2	3	1	12	3	
Julio Lorenzo	53.5R	1-8"			17	16	23	38	20	4	a 118	50	
John Caparra	53.6R	1-4"	7	4	7	7	8	8	5	3	49	15	
John Barkett	53.7R	1-14"	26	83	119	110	135	131	94	57	u 765	v 293	
I. N. Robinson, Jr.	53.8R	1-14"	105	142	292	414	431	278	378	101	w 2141	x 388	
H. N. Hansen, H. C. Hansen, and William Oiger(y)	54.9R	1-10"		68	75	100	121	104	89	86	z 643	160	

• Mileage along Tom Paine Slough from its mouth at Mile 54.3L on Old San Joaquin River.

•• Left bank diversions into the Mossing Ranch, Stewart Tract, and Roberts Island (below Mile 58.9L) are not included since that area is considered to be within the Delta Lowlands. Tidal effect ceases at about Mile 68.0.

r Mileage along San Joaquin River from its mouth 4½ miles below Antioch.

a Additional acre-feet diverted: November 1.

b Additional acre-feet diverted: February 15.

c Of this acreage, 11 was double cropped.

d Of this acreage, 40 was double cropped.

e This acreage also received an undetermined amount of water from controlled drainage. Of this acreage, 170 was double cropped.

f Of this acreage, 2 was double cropped.

g Of this acreage, 15 was double cropped. Includes 30 acres which also received an undetermined amount of well water.

h Additional acre-feet diverted: November 17.

i Combined acreage for Miles 49.3R and 49.5R.

j Additional acre-feet diverted: November 10.

k Includes 52 acres of Vieira lands.

m Additional acre-feet diverted: November 2.

n Additional acre-feet diverted: November 10.

p Of this acreage, 37 was double cropped.

q Plant moved from Mile 52.1R in 1955.

r Replaces a 12" unit.

s Additional acre-feet diverted: January 33.

t New installation in 1955.

u Additional acre-feet diverted: November 10. The acreage listed for Mile 53.8R also received an undetermined amount of water from Mile 53.7R.

v Of this acreage, 14 was double cropped.

w Additional acre-feet diverted: November 17.

x The acreage listed for Mile 53.8R also received an undetermined amount of water from Mile 53.7R.

y Formerly listed as R. E. Albertson.

z Additional acre-feet diverted: November 30.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
SAN JOAQUIN RIVER* (contd.) (Stockton to Vernalis)													
--JUNCTION WITH MIDDLE RIVER--	56.2L												
Oakwood Stock Farm	57.0R	1-14"		192	21	193	453	363	26		1248	480	
James Tobin	57.15R	1-7"	17	4	43	43	44	32	34	8	225	a 38	
Frank Dewar, et al.	57.38R	1-4"	4	6	3	27	28	26	17		111	b 28	
Andrew B. Calori	57.45R	1-6"		12	6		12	3			33	30	
C. Cardella and Company	57.5R	1-4"	14	12	2	3	4	3	2		40	16	
A. Queirolo	57.65R	1-3"				PLANT REMOVED							
A. Queirolo	58.6R	1-3"		1		1	1	2	1		6	33	
R. Mauro	58.7R	1-4"	1	1	1	2	1	5	2	1	14	13	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	58.8												
--U. S. 50 HIGHWAY-MOSSDALE BRIDGE RECORDING GAGE--	58.9												
Mertle Abersold	59.25R	1-6"	6	5	17	21	39	39	19	19	c 165	55	
M. H. Madruga	59.3R	1-15"	17	80	139	152	243	312	135	145	1223	254	
Eugene J. Rossi, et al.	59.5L	1-14"		63		224	73	141	86	10	597	d 170	
--WESTERN PACIFIC RAILROAD BRIDGE--	59.5												
M. H. Madruga	e 60.1R	1-6"		15	2	22	34	15	10	11	109	30	
James and Leslie Little	60.4L	1-4"			12	8	7	4	7		38	7	
A. F. Windeler	60.5L	f 1-16"		41	58	115	119	196	103	5	g 637	170	
E. Picchi and Son h	60.5R	1-8"		20	23	24	52	25	25	23	192	68	
E. Picchi and Son h	61.4R	1-12"	78	33	35	171	134	132	63	38	684	214	
A. F. Windeler	61.5L	1-8"				NO DIVERSION							
Jack Williams	62.0R	i 1-8"		28	1	24	28	30			111	50	
Bernice Von Sosten	62.0L	1-12"		121	50	93	186	159	106	68	j 783	k 212	
--PARADISE DAM (HEAD OF PARADISE CUT)-	62.2L												
Paradise Mutual Water Company	m 62.2L	1-14" 1-20"	132	153	250	440	326	321	246	25	n 1893	821	
Dethlefsen Brothers	63.0L	2-20"					514	495	377		p 1386	1190	
State of California	63.3L	1-14"	110	156	107	194	344	347	184	42	q 1484	r 448	
H. H. Grimes	63.6R	1-12"	65	102	121	177	218	216	39	75	1013	210	
Dethlefsen Brothers	64.6L	1-10"		1	34	31	26	54	15	17	178	50	
Alexander Hildebrand s	t 66.0R	1-6"				15	7	1	2		25	8	
Manuel Brazil	66.7L	1-8"	39	68	111	140	121	89	111	21	700	u 140	
Banta Carbona Irrigation District	v 67.5L	2-10" 2-16" 2-20" 3-24" 1-36"	4143	9723	6973	10711	10817	9823	5805	2308	w 60303	x 16979	
Glen M. West	70.0L	1-6"		48	72	87	85	130	89	7	y 518	k 132	
Richard Burnley	70.5R	1-10"				NO DIVERSION							
San Joaquin River Water Users Company	71.0R	2-16"	284	287	742	881	1027	1242	681	187	z 5331	1280	
E. Filippini	71.0R	aa 1-6"				9	15	4	1		29	9	
Tony M. Cardoza ab	72.1R	1-10"						26	42	9	77	ac 50	
H. J. Mortenaen and Barker	73.2R	1-8" 1-12"	238	252	216	353	255	205	42		ad 1561	ae 290	

* Mileage along San Joaquin River from its mouth 4½ miles below Antioch.
a Of this acreage, 19 was double cropped.
b Includes 15 acres of Thompson land.
c Additional acre-feet diverted: November 3.
d This acreage was double cropped.
e Plant is located on Walthall Slough which joins the San Joaquin River at this mile.
f Replaces a 12" unit.
g Additional acre-feet diverted: November 24.
h Previously listed as E. Pecchi and Son.
i Replaces a 6" unit.
j Additional acre-feet diverted: November 2.
k Of this acreage, 6 was double cropped.
m Plant is located on Paradise Cut which joins the San Joaquin River at this mile.
n Additional acre-feet diverted: February 65.
p Additional acre-feet diverted: November 226 and December 828.
q Additional acre-feet diverted: February 37 and December 7.
r Of this acreage, 30 was double cropped.
s Installed prior to 1955. Not previously listed.
t Pumping plant is located on old channel which joins the San Joaquin River at this mile.
u Includes 200 acres of Banta Irrigated Farms land.
v Plant is located on intake canal which joins the San Joaquin River at this mile.
w Additional acre-feet diverted: November 333.
x Includes 811 acres of Banta Irrigated Farms, 599 acres of Kasson District, and 1,053 acres of outside contracts. Of this acreage, 602 was double cropped in the district.
y Additional acre-feet diverted: January 7, November 35, and December 3.
z Additional acre-feet diverted: November 18.
aa Replaces a 4" unit.
ab New installation in 1955.
ac This acreage also received an undetermined amount of water from controlled drainage.
ad Additional acre-feet diverted: February 8.
ae Of this acreage, 50 was double cropped and 35 also received an undetermined amount of water from controlled drainage.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
SAN JOAQUIN RIVER (contd.) (Stockton to Vernalis)	*												
San Joaquin River Club	74.7L	1-6"	38	14	123	40	82	4	78	78	a 457	b 50	
E. A. Tassi	75.6R	1-16"	7	49	64	68	128	153	66	59	c 594	d 337	
Totals			5806	12274	10771	16350	17931	16817	10377	3767	94093	27629	
Average Cubic Feet Per Second			98	200	181	266	301	283	169	63	194		
FRENCH CAMP SLOUGH	✱												
Carolyn Weston	1.05L	1-12"	30	41	29	55	74	89	50	83	451	125	
Carolyn Weston	1.4L	1-7"			1	1	46	2	28		78	60	
Carolyn Weston	1.5L	1-6"	3	6		28	25	1	12		75	40	
--FRENCH CAMP TURNPIKE--	2.0												
Frank West	2.2L	1-10"	112	107	182	218	146	286	232	134	e 1417	f 229	
Manuel E. Granados	2.3R	1-3"		3	2	5	4	1			15	3	
Frank West	3.0L	1-10"	17	14	40	33	64	44	42	25	279	30	
Tom Gomes	3.3L	1-5"				5		3	3		11	9	
Tom Gomes	3.4L	1-4"				3	1		2		6	3	
--U. S. 50 HIGHWAY--	3.45												
--SOUTHERN PACIFIC RAILROAD BRIDGE--	3.6												
Milton O. Boege	3.8L	1-8"		1							1	6	
Robert L. Bordenave	3.8R	1-12"							10	33	43	50	
--WESTERN PACIFIC RAILROAD BRIDGE--	4.1												
Clark Anderson	4.2R	1-14"		179	345	149		56	88		817	g 105	g 140
--GAGING STATION - FRENCH CAMP SLOUGH NEAR FRENCH CAMP--	5.4												
Totals			162	351	599	497	360	482	467	275	3193	660	140
Average cubic feet per second			3	6	10	8	6	8	8	5	7		
CALAVERAS RIVER h													
Totals			0	66	36	190	159	194	97	27	769	277	0
Average cubic feet per second			0	1	1	3	3	3	2	0	2		
MOKELUMNE RIVER i													
Totals			153	455	995	1878	2146	1935	1036	250	8848	1899	291
Average cubic feet per second			2	8	16	32	35	31	17	4	18		
COSUMNES RIVER j													
Totals			0	78	576	849	674	700	389	0	3266	1335	266
Average cubic feet per second			0	1	9	14	11	11	7	0	7		
SACRAMENTO RIVER BELOW SACRAMENTO	**												
--RIO VISTA BRIDGE--	12.9												
John Lira	13.0R	1-6"	2	2	7	65	78	17	33	4	k 208	52	
C. A. Beach	45.2L	1-12"			19	53	50	52		10	184	116	
W. and B. Correa	45.5L	1-10"		7	25	57	67	16			172	80	
Hack and Forsythe	45.75L	1-8"				NO DIVERSION							
A. J. Sweeney	45.95L	1-10"			39	125	151	47	22		384	189	
--FREEPORT BRIDGE--	46.0												
Freeport Development Company	46.25L	1-8"		11	32	152	99	90			384	285	

* Mileage along San Joaquin River from its mouth 4½ miles below Antioch.
✱ Mile and Bank above Mouth.
** Mileage above Chain Island.
a Additional acre-feet diverted: January 7, February 50, and November 81.
b Recreational lakes. These lakes also received an undetermined amount of water from controlled drainage.
c Additional acre-feet diverted: January 1 and November 41.
d Of this acreage, 222 also received an undetermined amount of water from controlled drainage.
e Additional acre-feet diverted: November 11.
f Of this acreage, 30 was double cropped.
g This acreage also received 2,616 acre-feet of water from controlled drainage.
h Below gaging station - Calaveras River near Stockton, Mile 7.9. Individual diversions are shown in Table No. 191.
i Below gaging station - Mokelumne River at Woodbridge, Mile 19.2. Individual diversions are shown in Table No. 190.
j Below gaging station - Cosumnes River at McConnell, Mile 10.7. Individual diversions are shown in Table No. 189.
k Additional acre-feet diverted: November 3.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955 (contd.)

Water User	Mile and Bank	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
SACRAMENTO RIVER BELOW SACRAMENTO (contd.) *													
L. J. Dee	46.8L	1-10"	4	21	35	80	59	45	23		267	108	
L. O. Klotz	47.3L	1-8"		46	33	68	57	82	48	34	368	45	
E. A. Franklin	47.5L	1-8"				19	26	44	8		97	50	
George Coleman	47.7L	1-6"				22	18	18	6		64	62	
M. A. Richardson	53.7L	1-6"				10	5	5	1		21	25	
--"M" STREET BRIDGE--	59.0												
Totals			6	87	190	651	610	416	141	48	2149	1012	0
Average cubic feet per second			0	1	3	11	10	7	2	1	4		
YOLO BY-PASS (WEST CUT)	**												
H. L. Sorensen(a)	4.2R (1.9)	1-14"							118	258	376	b 200	
Mounds Farms	4.2R (2.0)	2-12"		183	193	248	320	273	220	139	c 1576	d 700	
H. L. Sorensen	4.2R (2.0)	1-16"		103	103	171	163	143	125	107	f 915	e 320	
Charles L. Maben	5.7R (0.9)	1-18"								482	g 482	h 190	
R. S. W. Ranch	5.7R (1.5)	1-16"	121	161	231	349	434	472	425	43	i 2236	400	
Fridolf Anderson	6.75R (0.6)	1-16"				62	110	60			232	240	
James Iriart	7.85R	1-16"			431	399	592	429	321	224	j 2396	k 585	
Swanston Land Company	7.87R (1.7)	1-16"				186	160	311	242		899	620	
Vaughn and Burlingham	7.87R (2.1)	1-14"	41	28	111	133	159	159	101	60	792	230	
Vaughn and Burlingham	7.87R (2.5)	1-14"	73	36	160	209	211	210	143	89	1131	315	
Vaughn and Burlingham	7.87R (2.7)	1-14" 1-16"		22	100	37	131	126	59	65	540	200	
Swanston Land Company	8.7R	1-16"							232	48	m 280	h 90	
J. H. Glide Estate	9.3R	1-14"								56	n 56	h 140	
T. S. Glide(a)	10.9R (0.4)	1-20"					280	643	180	45	1148	d 1150	
T. S. Glide	11.0R	1-10"					88				88	p 180	
T. S. Glide	12.4R	1-14"				28	262				290	400	
T. S. Glide	13.15R	1-20"					282	66			p 348	400	
--SACRAMENTO NORTHERN RAILROAD--	13.2												
T. S. Olide	14.8R	2-16"				168	523	220			911	900	
T. S. Olide(a)	17.1R (1.8)	3-20"		1587	2307	3483	3288	3282	1100	241	q 15288	1732	1710
T. S. Glide	18.6R	1-36"		624	8	254	258	89			r 1233	750	
--U. S. 40 AND 99W CAUSEWAY--	20.1												
Totals			235	2744	3644	5727	7261	6483	3266	1857	31217	9742	1710
Average cubic feet per second			4	46	59	96	118	105	55	30	64		
MISCELLANEOUS	*												
Disappointment Slough													
H. Moffat Co. and Eldon Land Co.	2/6-6P	1-18"	117	187	319	391	607	608	271	52	2552	400	
H. Moffat Co. and Eldon Land Co.	2/6-6J	1-14"	56	273	345	455	524	528	255	54	2490	375	
White Slough													
J. G. and S. W. Imeson	3/5-25C	1-16"	18	164	162	283	274	317	268	163	s 1649	220	
J. G. and S. W. Imeson	3/5-26C	1-12"	70	145	116	285	281	247	161	52	t 1357	250	

* Mileage above Chain Island
** Mileage above Prospect Island.
* Figures represent North Townships, East Ranges, and Sections. Letters represent the ¼-¼ corner. See text.
a New installation in 1955.
b The acreage listed for 4.2R (1.9) also received an undetermined amount of water from Mounds Farms 4.2R (2.0).
c The acreage listed for 4.2R (1.9) also received an undetermined amount of water from Mounds Farms 4.2R (2.0). Additional acre-feet diverted: November 51 and December 51.
d Includes 100 acres of duck club land.
e Additional acre-feet diverted: November 23 and December 14.
f Of this acreage, 30 was reused for duck ponds.
g Additional acre-feet diverted: November 2,381 and December 262.
h All duck ponds.
i Additional acre-feet diverted: November 105.
j Additional acre-feet diverted: November 242 and December 51.
k Includes 40 acres of duck ponds.
m Additional acre-feet diverted: November 23 and December 20.
n Additional acre-feet diverted: November 21.
p The acreage listed for Mile 11.0R also received an undetermined amount of water from Mile 13.15R.
q Additional acre-feet diverted: November 278 and December 167.
r Additional acre-feet diverted: November 116 and December 58.
s Additional acre-feet diverted: November 70 and December 9.
t Additional acre-feet diverted: November 48.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955 (contd.)

Water User	Mile and Bank*	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
MISCELLANEOUS (contd.)													
Hog Slough													
Robinson Farms	4/5-28B	Gravity				20	26	28	20	24	118	a	
Robinson Farms	4/5-28B	Gravity		85		67	92	71	57	105	b 477	a 182	
Thompson-Folger Company	4/5-28C	1-12" Gravity		219	235	372	350	404	246	413	c 2239	d 540	
Beaver Slough													
C. B. Orvis	4/5-15C	1-15"	50	51	137	233	333	287	186	138	e 1415	201	
C. B. Orvis	4/5-15D	1-18"	91	72	213	367	401	384	157	243	f 1928	447	
Canal Ranch	4/5-16E	1-8"		18	103	138	173	160	104	56	752	142	
Canal Ranch	4/5-16D	1-8"		57	53	137	110	109	52	46	564	117	
Burton Slough													
Egbert O. Morse	5/5-28D	1-6"					7	9	4		20	20	
Barnes Ranch	5/5-24D	1-4"					4	22			26	41	
Egbert O. Morse	5/5-20K	1-8"					33	20			53	72	
Egbert O. Morse(g)	5/5-16N	1-16"		134	587	502	649	633	225		2730	50	273
Egbert O. Morse(g)	5/5-15M	1-10" 1-12" 1-14"			462	812	862	580	448	6	3170		480
East Dredger Cut - Snodgrass Slough													
Alfred Kuhn	6/5-31R	1-12"				21	7	9	6		43	40	
Alfred Kuhn	6/5-31N	1-14"				NO DIVERSION							
Alfred Kuhn	6/4-36Q	1-16"	22	93	48	276	409	321	185		1354	348	
Duck Slough Extension													
Isabella Wineman	6/2-26B	1-14"	31	77	144	245	207	208	171	50	h 1133	255	
Isabella Wineman	6/2-26D	1-12"	27	53	115	154	147	129	127	20	i 772	205	
Isabella Wineman	6/2-26J	1-14"	66	91	200	373	402	313	181	188	j 1814	330	
Hass Slough													
Raahauge and Joseph	6/2-33H	1-12"		63	54	45	73		57	22	k 314	m 40	
Reclamation District 2068	6/2-34G	2-30" 1-36"	1569	5325	6750	10443	10681	10080	8179	5056	n 58083	p 9197	
Francis F. Gunning	6/2-34F	1-16"	62	126	193	219	285	262	204	163	q 1514	340	
Cache Slough													
Ervin E. Vassar	5/2-4B	1-14"	3	128	142	197	166	182	108	103	r 1029	260	
Jack Parker	5/2-4K	1-12"		44	59	65	49	51	41	31	s 340	100	
Ervin E. Vassar	5/2-4K	1-18"	3	129	194	296	502	436	388	160	t 2108	u 725	
Calhoun Cut													
Hamilton and Nymand	5/1-25D	1-10"			8	8	16	15	8	8	63	22	
Matilda Hall	5/2-19J	1-10"		31	53	76	72	60	29	42	363	90	
Unsegregated													
Benjamin Holt	2/6-20B	1-12"				NO DIVERSION							
Sam Hernandez	2/6-17D	1-3"				NO DIVERSION							
Guodi Segarina	2/6-17C	1-12"				21	10	21			52	v 38	
E. V. Lang	3/5-26R	Gravity		21	28	39	42	42	28	35	235	m 70	
George Emde	3/5-23L	1-10"		26	29	55	54	50	33	33	280	120	
George Emde(g)	3/5-14L	1-14"				143	171	149	113	69	w 645	40	40

* Figures represent North Townships, East Ranges, and Sections. Letters represent the ¼-¼ corner. See text.

a Combined acreage for two plants at 4/5-28B This acreage also received an undetermined amount of water from the Woodbridge Irrigation District, and was reused for duck club land.
b Additional acre-feet diverted: November 25 and December 190.
c Additional acre-feet diverted: November 117.
d Includes 118 acres reused as duck club land.
e Additional acre-feet diverted: November 9 and December 64.
f Additional acre-feet diverted: November 33.
g New installation in 1955.
h Additional acre-feet diverted: November 30.
i Additional acre-feet diverted: November 25.
j Additional acre-feet diverted: November 65.
k Additional acre-feet diverted: November 22 and December 11.
m This acreage was reused for duck ponds.
n Additional acre-feet diverted: November 2,107 and December 31.
p Includes 141 acres of duck ponds. An additional 1,95- acres inside and 1,491 acres outside the district were irrigated by controlled drainage water.
q Additional acre-feet diverted: November 41 and December 21.
r Additional acre-feet diverted: November 36.
s Additional acre-feet diverted: November 60
t Additional acre-feet diverted: November 65 and December 33.
u Of this acreage, 40 was reused for duck ponds.
v This acreage also received an undetermined amount of well water.
w Additional acre-feet diverted: December 43.

TABLE 192

DIVERSIONS AND ACREAGES IRRIGATED - DELTA UPLANDS - 1955 (contd.)

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
MISCELLANEOUS (contd.)	*												
Cotta and Sousa(a)	4/5-34Q	1-16"					52	272	95	43	b 462	c 330	
W. C. Hamel	8/3-30B	1-10"				15					15	d 33	
H. L. Sorensen	6/3-20J	1-12"						183	212	71	466	e 220	
H. L. Sorensen	6/3-19E	1-14"		152	280	173	276	280	112	331	f,g 1604	240	
H. L. Sorensen	6/3-30D	1-14"	40	138	258	419	361	425	122	384	h 2147	g,i 801	
H. L. Sorensen	6/3-30L	1-16"	2	161	86	302	289	240	188	231	j 1499	k 320	
Reclamation District 2068	6/2-25P	1-12"	69	56	167	195	230	187	139	86	m,n 1129	160	
Sub-Irrigated lands(p)			94	252	315	410	441	441	315	126	2394	630	
MISCELLANEOUS DELTA UPLANDS Totals			2390	8371	11855	18252	19668	18763	13495	8604	101398	18017	793
Average cubic feet per second			39	141	193	307	320	305	227	140	209		
DELTA UPLANDS Totals			14578	42730	48092	72698	76852	73558	48100	21908	398516	107606	3200
Average cubic feet per second			237	718	782	1222	1250	1196	808	356	820		
Monthly use in per cent of seasonal			3.7	10.7	12.1	18.2	19.3	18.4	12.1	5.5			

* Figures represent North Townships, East Ranges, and Sections. Letters represent the ¼-¼ corner. See text.
a New installation in 1955.
b Additional acre-feet diverted: November 34.
c This acreage also received an undetermined amount of water from the Woodbridge Irrigation District.
d This acreage also received 30 acre-feet of well water.
e Includes 100 acres of duck ponds.
f Additional acre-feet diverted: November 59 and December 29.
g Five hundred and thirty acres listed under 6/3-30D received an undetermined amount of water from 6/3-19E.
h Additional acre-feet diverted: November 65.
i Includes 230 acres of duck ponds.
j Additional acre-feet diverted: November 51 and December 25.
k Includes 20 acres of duck ponds.
m Includes an undetermined amount of water from controlled drainage.
n Additional acre-feet diverted: November 45.
p Estimated consumptive use on lands in Delta Uplands considered as sub-irrigated from tidal channels during 1955 without a specific point of diversion.

TABLE 193

DIVERSIONS AND ACREAGES IRRIGATED - SAN JOAQUIN RIVER - 1955
(Vernalia to Fremont Ford Bridge)

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--DURHAM FERRY BRIDGE - GAGING STATION - SAN JOAQUIN RIVER NEAR VERNALIS--	76.7												
A. J. Chisholm	78.9R	1-10"	82	171	214	212	310	290	167		1446	366	
Cruze, Gonsalves, and Moresco(a)	79.4R	1-20"	47	222	112	161	215	204	136		1097	b 198	
--STANISLAUS RIVER--	79.7R												
W. C. Blewett Estate	80.7L	1-12"	47	224	141	132	190	266	133		1133	191	
W. C. Blewett Estate	81.8L	2-12" 1-14"	238	406	405	556	612	638	332	109	c 3296	894	
--MAZE ROAD BRIDGE - RECORDING GAGE--	81.85												
Blewett Mutual Water Company	81.95L	1-10" 2-12"	214	709	725	822	1122	979	280	184	d 5035	1070	
El Solyo Water Company	82.0L	1-10" 3-18"	1817	2636	1822	2988	3016	2761	1627	1135	e 17802	f,g 3553	
--GAGING STATION - SAN JOAQUIN RIVER AT HETCH HETCHY WATER SUPPLY CROSSING--	82.65												
El Solyo Ranch(h)	83.3L	1-12"				58	98	126	155		g 437		
Faith Ranch	84.4R	1-20"	49	409	390	551	362	363	238	245	i 2607	400	
--TUOLUMNE RIVER--	91.0R												
--RECORDING GAGE--	91.8L												
--WEST STANISLAUS IRRIGATION DISTRICT INTAKE CANAL--	91.8L												

* Mileage along San Joaquin River from its mouth 4½ miles below Antioch.
a Formerly listed as Cruze, Kirby, and Moresco.
b Includes 60 acres of Chisholm lands.
c Additional acre-feet diverted: November 9.
d Additional acre-feet diverted: November 107.
e Includes an undetermined amount of water returned to river by spill. Additional acre-feet diverted: November 406.
f Includes 60 acres which also received an undetermined amount of well water. This acreage also received an undetermined amount of controlled drainage water.
g One hundred and forty two acres listed for Mile 82.0L also received 437 acre-feet of water from Mile 83.3L.
h New installation in 1955.
i Additional acre-feet diverted: December 29.

TABLE 193

DIVERSIONS AND ACREAGES IRRIGATED - SAN JOAQUIN RIVER - 1955
(Vernalis to Fremont Ford Bridge) (contd.)

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
West Stanislaus Irrigation District	91.8L	1-12" 1-24" 6-26"	7154	10159	10509	11739	14640	9695	5788	1161	a 70845	b 22934	
Fred Lara #1	**(0.6S)	1-14"	164	63	67	216	190	137			837	175	
Frank Sarmento #1	**(0.7N)	2-16"	150	110	166	32	156	131	91		836	c 912	
Frank Sarmento #2	**(1.1N)	1-14" 1-16"	239	352	669	444	480	397	119	157	2857	c	
Fred Lara #2	**(2.2S)	1-16"	25	12	12	64	45	30	24	9	d 221	90	
Frank Sarmento #3	**(2.3N)	2-16"		13	118	70	119	255	119		694	145	
J. V. Steenstrup Estate(e)	93.1R	2-12"	229	68	313	665	656	655	246		2832	149	f 167
Walter W. Crawford(e)	g 93.2L	1-6"		11	8	6	16	19	4	2	h 66	32	
George Covert	i 94.1L	1-3" 1-6"	18	53	51	56	95	67	58	76	j 474	95	
Rancho Dos Rios	94.7R	1-12"	149	183	231	305	460	393	281	255	k 2257	m 406	
L. S. Crane(n)	95.5R	1-10"		43	8	27	45	47	52	38	p 260	q 113	
Bostick Brothers	95.8R	1-10"	18	68	41	49	14	62	47	10	309	r 86	
W. F. Cook	96.0L	1-18"	250	174	391	454	391	546	340	183	s 2729	500	
--GAOINO STATION - SAN JOAQUIN RIVER AT GRAYSON (LAIRD SLOUOH BRIDGE)--	96.05												
E. S. Brush	98.5R	1-7"	10	16	36	34	32	38	26	19	t 211	50	
Rancho El Pescadera	98.9L	1-18"	113	554	238	335	557	309	86	39	u 2231	v 951	
John C. Toata(e)	103.0L	1-14"	12	22	14	31	32	39	15		165	64	
--PATTERSON BRIDGE - RECORDING GAGE--	104.4												
Patterson Water Company	104.4L	1-14" 2-18" 3-20" 1-36"	4408	5193	6122	8672	8436	9669	6178	927	w,x 49605	y 13657	
Chase Brothers	104.5R	1-10"	129	155	192	331	287	274	303	132	1803	282	
M. L. Simmons	104.52L	1-5"		7	5	10	2	9	5	3	41	9	
Harry Black	104.7L	1-3"				NO DIVERSION							
Chase Brothers	106.5R	1-10" 1-12"	190	234	329	428	469	349	260	80	2339	500	
Tony Spinelli	109.1R	1-12"	11	13	28	37	43	52	29	29	z 242	79	
Twin Oaks Irrigation Company	109.8L	1-12" 2-16" 1-18"	338	1553	1682	2031	1972	1963	802	125	aa 10466	1181	x 555
T. J. Henderson	110.8R	1-8"			16	39	127	122	92	56	ab 452	ac 160	
J. Holtzman	112.5L	ad 1-3"		7	3	9	11	1	12		ae 43	20	
L. A. Thomson and J. H. Barbour af	112.55R	1-16"	119	130	182	278	235	215	195	29	1383	ag 351	
Frank C. Mosier	113.4R	1-10"	142	114	78	146	147	140	117	102	ah 986	ai 175	
--CROWS LANDING BRIDGE - RECORDING GAGE--	113.5												
A. J. Silveria	113.85R	1-6"		3		7	3	7	4		24	6	
A. J. Silveria	114.35R	1-7"		6	6	12	12	9	6	1	52	20	

* Mileage along San Joaquin River from its mouth 4½ miles below Antioch.
** West Stanislaus Irrigation District Intake Canal - The Intake Canal joins the San Joaquin River at Mile 91.8L. Distance from the San Joaquin River and the bank is shown in ().
a Additional acre-feet diverted: November 309.
b This acreage also received 11,293 acre-feet of Delta-Mendota Canal water as follows: April 2,497, June 2,447, July 3,719, and August 2,630 acre-feet. Of this acreage 705 was double cropped. Includes 2,266 acres irrigated outside of district. Portions of this acreage received an undetermined amount of well water.
c Combined acreage for Miles **(0.7N) and **(1.1N). Of this acreage 39 was double cropped.
d Additional acre-feet diverted: November 8.
e Installed in 1954. Not previously listed.
f This acreage also received an undetermined amount of controlled drainage water.
g This is a portable unit which diverts water at Miles 93.2L and 93.4L.
h Additional acre-feet diverted: November 5.
i Pumping plant is located on old channel which joins the San Joaquin River at this mile.
j Additional acre-feet diverted: November 33.
k Additional acre-feet diverted: February 3, November 1, and December 1.
m Of this acreage, 70 was double cropped and 60 received an undetermined amount of controlled drainage water.
n Formerly listed as C. H. Geer.
p Additional acre-feet diverted: November 6.
q Of this acreage, 44 was double cropped. This acreage also received an undetermined amount of Turlock Irrigation District water.
r This acreage was double cropped.
s Additional acre-feet diverted: February 54, November 8, and December 2.
t Additional acre-feet diverted: November 4.
u Additional acre-feet diverted: February 4.
v Of this acreage, 14 was double cropped and 890 received an undetermined amount of well water.
w Additional acre-feet diverted: November 10.
x Seventy five acres of rice listed for Mile 109.8L also received an undetermined amount of water from Mile 104.4L.
y Of this acreage 2,304 was double cropped. This acreage also received 1,942 acre-feet of Delta-Mendota Canal water as follows: April 255, May 445, June 459, July 206, August 404, September 170, and October 3.
z Additional acre-feet diverted: November 1.
aa Additional acre-feet diverted: November 9.
ab Additional acre-feet diverted: November 26.
ac This acreage also received an undetermined amount of Turlock Irrigation District water.
ad Previously listed as a 4" unit.
ae Includes an undetermined amount of controlled drainage water.
af Formerly listed as Roy Ustick.
ag Of this acreage, 80 also received an undetermined amount of controlled drainage water.
ah Additional acre-feet diverted: November 2.
ai Of this acreage, 7 was double cropped.

TABLE 193

DIVERSIONS AND ACREAGES IRRIGATED - SAN JOAQUIN RIVER - 1955
(Vernalis to Fremont Ford Bridge) (contd.)

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Hazel P. Crow(a)	114.6L	1-2"					5	9	8	2	24	9	
Frank C. Mosier	114.63R	1-8"	52	36	48	67	74	63	67	41	448	90	
Manuel A. Serpa	114.75R	2-10"	122	43	163	81	219	144	108	43	b 923	c 180	
Hazel P. Crow	115.0L	1-10"		21	42	56	34	40	33	5	231	25	
Roy F. Crow	115.8L	1-10"	117	42	47	72	170	148	88	36	d 720	e 149	
L. B. Crow	116.05L	1-14"	59	58	134	150	167	166	141	49	f 924	g 210	
John W. Greer	116.5R	1-12"	265	190	200	234	251	265	69	16	h 1490	g 280	
D. L. McCoy	i 116.95R	1-10" 1-12"	14	33	39	37	54	65	31	10	J 283	88	
--MERCED RIVER SLOUGH--	122.2R												
--GAGING STATION - SAN JOAQUIN RIVER NEAR NEWMAN--	123.7												
--MERCED RIVER--	123.75R												
Emil Giovannoni	123.9L	1-4"				PLANT REMOVED							
VERNALIS TO FREMONT FORD BRIDGE													
Totals			16991	24516	25997	32704	36571	32157	18912	5308	193156	50845	722
Average cubic feet per second			276	412	423	550	595	523	318	86	397		
Monthly use in per cent of seasonal			8.8	12.7	13.5	16.9	18.9	16.7	9.8	2.7			

* Mileage along San Joaquin River from its mouth 4½ miles below Antioch.
a New installation in 1955.
b Additional acre-feet diverted: February 42 and November 9.
c Of this acreage, 70 was double cropped.
d Additional acre-feet diverted: November 45.
e Of this acreage, 40 was double cropped and 26 received an undetermined amount of Central California Irrigation District water.
f Additional acre-feet diverted: November 33.
g Of this acreage, 30 was double cropped.
h Additional acre-feet diverted: February 45.
i Pumping plants are located on drain which joins the San Joaquin River at this Mile.
J Includes an undetermined amount of controlled drainage water. Additional acre-feet diverted: November 3.

TABLE 194

DIVERSIONS AND ACREAGES IRRIGATED - SAN JOAQUIN RIVER - 19[illegible]
(Fremont Ford Bridge to Gravelly Ford

Water User	Mile and Bank a	Number and Size of Pump	Monthly Diversions in Acre-Feet												Total Diversion Jan.- Dec.	Acreage Irrigated	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Acre-Feet	General	Rice
--GAGING STATION - SAN JOAQUIN RIVER AT FREEMONT FORD BRIDGE--	169.5																
Stevinson Corporation	135. R	1-14"			[illegible]	49	[illegible]	[illegible]	[illegible]	[illegible]	5	6			[illegible]	a 65	
Errecа Farms(b)	1 1.4R	1-8"			[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible] 2 2	30	
Errecа Farms	161.9R	1-18"		16	41	[illegible]	12	[illegible]	144						316	[illegible] d 416	
Dye Farms	163.2R	e 1-12"			54	76	149	5	1[illegible]	224	85	5[illegible]			892	d 387	
D. L. McNamara	f 163. R	1-16"			14		29	25	[illegible]	18		16			132	d 60	
--GAGING STATION - SAN JOAQUIN RIVER NEAR DOS PALOS--	180.0																
San Luis Canal Company	g 180.6L	Gravity		920	10633	1[illegible]	[illegible]	2[illegible]41	2 124	25 5[illegible]	17[illegible]4	[illegible]	[illegible]	1,720	1[illegible]921	[illegible]2	180
--FIREBAUGH BRIDGE--	198.4																
Antone Zaninovich	200. 2R	1-4"				[illegible]	12		1[illegible]	3	13				[illegible]	1[illegible]	
--GAGING STATION - SAN JOAQUIN RIVER NEAR MENDOTA--	200.2																
--MENDOTA DAM--	201.[illegible]																
--DELTA-MENDOTA CANAL--	[illegible].3L																
Central California Irrigation District	h 208.[illegible]3L	Gravity		4567	44049	[illegible]4749	75562	82928	83947	[illegible]088	46316	21350	[illegible]97[illegible]	18[illegible]6	1 1[illegible] 9	[illegible] 1260[illegible]9	10[illegible]1
Orestands Water Association(k)	m	m								1[illegible]	1 152	4[illegible]31	182	[illegible]14	r [illegible]		
Lakuna Water District(k)	n	[illegible]							11[illegible]	1[illegible]	[illegible]9				3[illegible]3		120
Panoche Water District(k)	n	m			[illegible]75	119	255	1210	1206	542					4[illegible]5	[illegible]3[illegible]3	[illegible] 1552
Firebaugh Canal Company	n 2[illegible]6. 3L	2-24" 2-36" 2-42"		912	5125	10867	10088	13283	14350	14[illegible]4	[illegible]2[illegible]	2594	6[illegible]	[illegible]31	[illegible]7[illegible]27	17497	5[illegible]1
--FRESNO SLOUGH--	2[illegible]8.93L																
--LONE WILLOW SLOUGH--	219.8R																
Columbia Canal Company	21[illegible].8R	q	30[illegible]	212	5923	[illegible]415	[illegible]55[illegible]	[illegible]36	932	[illegible]49[illegible]	19[illegible]	2[illegible]7[illegible]	[illegible]328	1394	[illegible]210	[illegible] [illegible]	[illegible]275
--GAGING STATION - SAN JOAQUIN RIVER AT WHITEHOUSE--	21[illegible].83																
United Farms Company	225.2L	1-12"								[illegible]					[illegible]	[illegible]	
Rose Campbell	232.5[illegible]L	1-4"				16		6	14	[illegible]4					52	s 24	
--HEAD OF GRAVELLY FORD CANAL--	232.8R																
FREMONT FORD TO GRAVELLY FORD Totals			[illegible]05	6347	[illegible]6277	[illegible]9873[illegible]	[illegible]1145[illegible]9	[illegible]13300	[illegible]13510[illegible]	[illegible]13014[illegible]	[illegible]7[illegible]	[illegible]2[illegible]2	[illegible]2[illegible]3	[illegible]1[illegible]	[illegible]9	228[illegible]1	20582
Average cubic feet per second			5	11[illegible]	1078	1652	1863	2249	219[illegible]	211[illegible]	1.55	86[illegible]	24[illegible]	220	[illegible]4		
Monthly use in per cent of seasonal			0	[illegible].[illegible]	[illegible].[illegible]	11.5	13.[illegible]	15.[illegible]	15.6	15.2	10.1	[illegible].	2.6[illegible]	1.6			

e Mileage along San Joaquin River from its mouth [illegible] miles below Antioch.
a Includes 135 acres which also received an undetermined amount of well water.
b New installation in 1955.
c Seventy one acres listed for Mile 161.9R also received an undetermined amount of well water.
d This acreage also received an undetermined amount of well water.
e This is a portable unit which diverts water at Miles 162.8R and 163.2R.
f Plant is located on East Side Canal which joins the San Joaquin River at this mile.
g Point of diversion is at head of Temple Slough.
h Point of diversion is considered to be Mendota Pool.
i Includes main and outside canals and Helm Ditch.
j Includes some double cropping and interplanting.
k Data furnished by U. S. Bureau of Reclamation.
m This water was transported by the Central California Irrigation District.
n Includes 1,200 acre-feet delivered from Delta-Mendota Canal via San Luis Wasteway, in October.
p This acreage also received water from the Delta-Mendota Canal.
q Includes gravity diversion in Lone Willow Slough, Monry Canal pumps, and Columbia pumps in Mendota Pool.
r Crop acreage unknown. This acreage also received an undetermined amount of well water.
s Includes 2 acres which also received an undetermined amount of well water.

TABLE 195

DIVERSIONS AND ACREAGES IRRIGATED - SAN JOAQUIN RIVER - 195[illegible]
(Gravelly Ford to Friant Dam)

Water User	Mile and Bank e	Number and Size of Pump	Monthly Diversions in Acre-Feet												Total Diversion Jan.- Dec.	Acreage Irrigated	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Acre-Feet	General	Rice
W. A. Kochergen	23[illegible].56R	1-6"			21	2[illegible]	1					[illegible]6	1[illegible]		[illegible]2	a 66	
W. A. Kochergen	234. 6R	1-6"					NO DIVERSION										
Ernest D. Hart	235. 3L	1-3"				[illegible]	1	1	1	1	1	[illegible]	[illegible]		11	1	
J. E. Fuller(b)	235.[illegible]R	1-5"				21	[illegible]	1[illegible]	[illegible]9	1[illegible]	[illegible]				[illegible]6	88	

e Mileage along San Joaquin River from its mouth [illegible] miles below Antioch.

a This acreage was double cropped.
b Formerly listed as J. M. Swegart.

TABLE 195

DIVERSIONS AND ACREAGES IRRIGATED - SAN JOAQUIN RIVER - 19[illegible]
(Gravelly Ford to Friant Dam) (contd.)

Water User	Mile and Bank e	Number and Size of Pump	Monthly Diversions in Acre-Feet												Total Diversion Jan.-Dec. Acre-Feet	Acreage Irrigated	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		General	Rice
F. Boldorott a	230.28R	1-8"						1[illegible]	22	[illegible]					40	[illegible]	
--GAGING STATION - SAN JOAQUIN RIVER NEAR BIOLA--	230.4R																
Smith and McInturf	237.33L	1-8"			[illegible]				[illegible]	[illegible]					[illegible]	[illegible]	
M. S. Beatty d	237.43L	1-6"					NO DIVERSION										
Milton A. Peterson	237.98R	1-6"			7			21	40	40	15				13	79	
--SKAGGS BRIDGE--	238.18																
--BOWSER RECORDING GAGE--	242.41L																
A. and M. Overgaard	243.84R	1-6" 1-6"				47	2[illegible]	110	[illegible]	10[illegible]	[illegible]	14			47[illegible]	[illegible] 145	
C. B. Hines	244.03L	1-5"					NO DIVERSION										
Y. N. Donny	244.86L	1-7"			21	29	12	25	7	18	2	17	10		f 141	g 1[illegible]	
C. L. Hammer	245.36R	1-6"						6				[illegible]			1[illegible]	[illegible]	
George Mordeca	245.63R	1-1½"						1	2		1	[illegible]	1	1	[illegible]	4	
Y. N. Donny	245.81L	1-6"				4							11		15	f,g 41	
Jasper Ranch	246.15L	1-5"						1							1	[illegible]	
Jasper Ranch	246.34L	1-6"					NO DIVERSION										
N. W. Valentine	246.73L	1-5"					NO DIVERSION										
--U. S. 99 HIGHWAY BRIDGE--	247.38																
Sam Deanda	247.50R h	1-4"					PLANT REMOVED										
G. Oberti and Sons	247.64R	1-5"				[illegible]		18	3[illegible]	[illegible]	19	21			150	[illegible] 120	
G. Oberti and Sons	247.65R	1-4"					NO DIVERSION										
San Joaquin Light and Power Company	247.82R	1-3"					11	18	17	19	[illegible]	[illegible]			83	[illegible]	
--HERNDON RECORDING GAGE--	248.31L																
Fred B. Funch	248.51L	1-3"		[illegible]	[illegible]	[illegible]	5	14	[illegible]	[illegible]	[illegible]	[illegible]	4		70	14	
--SANTA FE RAILROAD BRIDGE--	249.23																
Miller Brothers	251.46L	1-5"						14	[illegible]	19					62	1[illegible]	
J. W. Carrell	253.0L	1-[illegible]"			35	[illegible]	45	1[illegible]	122	41	[illegible]	44	17		616	64	
J. W. Carrell	2[illegible].0L	1-6"						PLANT REMOVED									
J. W. Carrell	253.30L	1-4"			[illegible]	30	11	29	36	3[illegible]	[illegible]		4		205	22	
Fred Russell	253.79R	1-6"			4	6	[illegible]	2[illegible]	20	24	6	11	7		11[illegible]	46	
L. L. Howard	254.82R	1-5" 1-6"						4[illegible]	41	3[illegible]					120	3[illegible]	
Sycamore Island Stock Ranch #7 i	ee254.90	1-4"			1	14		6	3	6	1	[illegible]			44	13	
L. L. Howard	254.93R	1-6"						[illegible]4	[illegible]	17	1				[illegible]1	[illegible]2	
Greiner and Wright	254.98L	1-7"					NO DIVERSION										
Sycamore Island Stock Ranch #6	ee255.00	1-3"			1	11	[illegible]	1[illegible]	14	14	2[illegible]	12	[illegible]	1	[illegible]7	30	
Fresno State College	255.05L	1-4"					NO DIVERSION										
Sycamore Island Stock Ranch #5	255.34R	1-6"			[illegible]1	[illegible]0			[illegible]	50	131	[illegible]3			[illegible]6	J [illegible]	
Sycamore Island Stock Ranch #8 k	ee255.5	m 1-4"			2										2	4	
Sycamore Island Stock Ranch #4	ee255.84	1-5"			3[illegible]	22		2[illegible]	[illegible]	[illegible]2	52	26			[illegible]34	J 36	
Sycamore Island Stock Ranch #3	255.93R	1-4"			[illegible]	1[illegible]	[illegible]9	[illegible]4	[illegible]5	4	74				n 2[illegible]4	26	
Sycamore Island Stock Ranch #2	256.[illegible]2R	[illegible]-6"			[illegible]	[illegible]2	11	[illegible]	[illegible]	[illegible]	122	21			, 376	74	
Holland Ranch and Development Corporation	257.1L	1-8"				[illegible]2		1[illegible]	[illegible]0	[illegible]1					1[illegible]0	q 1[illegible]	

e Mileage along San Joaquin River from its mouth [illegible] miles below Antioch.
ee Point of diversion and place of use is on island in midstream.
a Formerly listed as Ruben Quinonez.
b This acreage also received an undetermined amount of well water.
c Includes 10 acres of Morello Winery lands. This acreage also received an undetermined amount of Fresno Irrigation District water.
d Previously listed as Lorraine Beatty.
e Of this acreage, 32 was double cropped.
f The acreage listed for Mile 245.81L also received an undetermined amount of water from Mile 244.8.L.
g This acreage also received an undetermined amount of Fresno Irrigation District water.
h Previously listed as a 5" unit.
i New installation in 1955.
j This acreage was double cropped.
k Temporary installation for 1955.
m This is a portable unit which diverted water at Miles [illegible].4R, 255.4R, and 2[illegible].5.
n Includes [illegible] acre-feet diverted by a 4" temporary unit located at Mile 255.4R.
p Includes 3 acre-feet diverted in March by a 4" temporary unit located at Mile 255.4R.
q Combined acreage for Miles 257.1L and 257.70L.

TABLE 195

DIVERSIONS AND ACREAGES IRRIGATED - UPPER SAN JOAQUIN RIVER - 1955
(Gravelly Ford to Friant Dam) (contd.)

Water User	Mile and Bank [a]	Number and Size of Pump	Monthly Diversions in Acre-Feet												Total Diversion Jan.- Dec. Acre-Feet	Acreage Irrigated	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		General	Rice
Holland Ranch and Development Corporation	257.70L	1-12"				43		5	104	73					225	a	
L. D. Cobb	258.08N	1-6" 1-7"			5	16	56	234	230	84	100	90	16	1	832	b 149	
--STATE HIGHWAY 41 BRIDGE--	258.33																
R. J. Curtis	258.39L	1-7"				8	21	53	54	67	53	17			273	66	
W. E. Roberts	258.80L	1-6"				9	7	54	34	26	17	12	5	1	165	c 147	
W. E. Roberts	258.90L	1-12"		1	3	45	57	113	123	86	51	23			502	c	
J. E. Cobb	259.39N	1-6" 1-7"				17	40	87	101	97	65	7	1		415	105	
--SITE OF OLD LANES BRIDGE--	259.76																
Marjorie E. Sims	259.80L	1-6"			10	7	6	32	41	37	12				145	36	
J. E. Cobb	260.4R	1-6"			6	16	20	38	46	40	34	10	1		211	95	
Duane M. Folsom	261.10L	1-2½"					NO DIVERSION										
R. C. Arnold	261.53R	1-4"			3	21	9	46	54	46	61	12	1		253	83	
Duane M. Folsom(d)	261.6L	1-3½									1	3			4	2	
Duane M. Folsom	261.70L	1-6"					10	77	179	181	57	8			512	e 205	
E. G. Rank(d)	ee261.75	1-5"						11	22	12	5				50	20	
E. G. Rank	ee261.90	1-5"						16	20	22	3				61	30	
E. G. Rank	ee262.07	1-6"						19	30	27	6				82	40	
Duane M. Folsom	262.27L	f 1-8"				29	37	95	72	82	45	40			400	81	
A. Brown	262.43L	1-5"				22	9	27	13	14	10	7			102	g 74	
E. G. Rank	262.48L	1-5"				5		13	28	39	23				g 108	h 63	
Dale McCoon	262.60R	1-6"					14	119		65					198	35	
--SAMPLES RANCH RECORDING GAGE--	262.66																
W. N. Rohde(i)	262.66L	1-7"				6		79	43	50	20		4		202	111	
Dale McCoon	263.40R	1-7"						67	240	272	109		29		717	107	
Dale McCoon	263.48R	1-6"							28	31	4				73	43	
Richard Jensen	263.76R	1-5"			39	77	89	106	109	109	107	107	28		771	90	
Pacific Coast Aggregate Company	264.00L	1-6" 1-8"						INDUSTRIAL USE ONLY									
N. W. Ball #1	j 264.00L	1-6"						20	37	22	5				84	15	
H. W. Ball #2	j 264.00L	1-5"			3	7	5	13	17	16	18	2			81	19	
H. W. Ball #3	j 264.00L	1-3"				10	8	21	31	19	14	9	2		114	10	
H. W. Ball #4	264.08L	1-6"			8	7	12	70	88	88	81	8			362	39	
Ike D. Ball	264.60R	1-6"			15	71	57	116	116	116	108	83	32		714	35	
W. F. Ball	264.83L	1-4" 1-5"			5	8	25	74	116	104	38	23	7		400	52	
V. D. Roullard	265.38L	1-6"				18		22	36	53	26				155	39	
V. D. Roullard	265.40L	1-5"			10	16	26	47	43	42	29	21	3		237	17	
Durando and Bellin	267.50L	1-7"	2		24	66	54	117	200	171	85	62	12	2	795	223	
--GAGING STATION - SAN JOAQUIN RIVER BELOW FRIANT--	268.13L																
--FRIANT BRIDGE--	268.68																
Wishon-Watson Company	269.18R	1-5"			1	13	6	9	16	25	8				78	41	
--COTTONWOOD CREEK--	269.53R																
--FRIANT DAM--	269.63																
GRAVELLY FORD TO FRIANT DAM																	
Totals			2	1	346	1042	749	2452	3269	3045	1859	841	216	6	13828	3775	0
Average cubic feet per second			0	0	6	18	12	41	53	50	31	14	4	0	19		
Monthly use in per cent of seasonal			0	0	2.5	7.5	5.4	17.7	23.6	22.0	13.5	6.1	1.6	0.1			

[b] Distance along San Joaquin River from its mouth 4½ miles below Antioch.
[a] Point of diversion and place of use is on island in midstream.
a Combined acreage for Miles 257.1L and 257.7L.
b Of this acreage, 12y was double cropped.
c Combined acreage for Miles 258.80L and 258.90L.
d New installation in 1955.
e Includes 8 acres which also received an undetermined amount of well water.
f Previously listed as a 7" unit.
g Twenty four acres listed for Mile 262.43L also received an undetermined amount of water from Mile 262.48L.
h Includes 38 acres which also received an undetermined amount of well water.
i Formerly listed as Holland Ranch and Development Corporation.
j Plant is located on pond whose major source of supply is from the Pacific Coast Aggregate Company plant located at this mile.

TABLE 196

DIVERSIONS AND ACREAGES IRRIGATED - FRESNO SLOUOH AND JAMES BY-PASS [a] - 1955
(The following table arranged from data arranged by U. S. Bureau of Reclamation)

Water User	Mile* From	Mile* To	Monthly Diversions in Acre-Feet Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Diversion Jan.- Dec. Acre-Feet	Acreage Irrigated General	Rice
State of California Mendota Waterfowl Mgt.	6.45	8.20					20	456	659	805	1610	2654	1406	524	b 8134		
Traction Ranch	#(0.75)				18	307	2	1182	897	829	188				3423	430	500
Reclamation District 1606	#(1.50)				22	44	73	83	87	71	20	24			424		
James Irrigation District	#(4.4)				1696	1585	401	1952	4165	4505	2202				16506	16558	2592
Fresno Slough Water Assn.	9.20	10.50			42	395	795	803	797	684	280	288	46		4130	479	387
J. W. Wilson	11.70				30	111	458	474	460	458	48				2039		
Tranquillity Irrigation District	12.00	13.75			2884	1934	4149	5855	4562	4998	948	399			25729	6172	1652
Melvin D. Hughes	c 12.20												50		50		
Totals			0	0	4692	4376	5898	10805	11627	12350	5296	3365	1502	524	60435	23639	5131
Average cubic feet per second			0	0	76	74	96	182	189	201	89	55	25	9	83		
Monthly use in per cent of seasonal			0	0	7.8	7.2	9.7	17.9	19.2	20.4	8.8	5.6	2.5	0.9			

* Mileage along Fresno Slough from its mouth at Mile 208.93L on the San Joaquin River.
\# Plant is located on James By-Pass. Mileage above confluence of James By-Pass with Fresno Slough is indicated in ().

a The water in Fresno Slough and James By-Pass is mainly derived from the San Joaquin River (Mendota Pool backwater created by Mendota Dam) and is occasionally augmented by flows from the Kings River via James By-Pass.
b Includes delivery from San Luis Canal and Delta Mendota Canal via San Luis Wasteway.
c Mobile pump.

TABLE 197

DIVERSIONS AND ACREAGES IRRIGATED - MERCED RIVER - 1955

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated General	Rice
--HILLS FERRY BRIDGE--	1.1												
Stevinson Water District #1	1.8R	1-16"	1	99	151	170	183	201	228		1033	a 325	
Stevinson Water District #2	3.8R	1-20"	55	321	292	562	528	781	434	261	b 3234	c 811	
Milton Gordon	4.3L	1-10"		13	24	32	41	59	54	34	d 257	e 102	
--GAGING STATION - MERCED RIVER NEAR STEVINSON--	4.6												
Salvatore De Angelis(e)	4.8L	1-12"	6	10	15	19	17	20	20		107	33	
Maria De Angelis	5.8L	1-12"	6	14	35	59	54	43	23	12	246	84	
Lydell Peck	6.1L	1-15"		38	134	180	164	119	130	27	f 792	224	
Stevinson Water District #3	7.7L	1-20"	220	213	201	249	464	513	401	255	g 2516	h 1128	
Manuel Clemintino	8.5L	1-12"	14	16	33	26	66	28	21		i 204	80	
Manuel Clemintino	8.9L	1-12"		33	46	42	55	47	41		264	109	
Samuel B. McCullagh	9.4L	1-12"	19	73	124	145	198	179	101	63	i 902	229	
J. R. Jacinto	9.6L	1-12"	31	39	95	63	75	97	62	45	507	j 107	
R. W. Adams and Mrs. J. B. Silva	10.35L	1-10"	19	154	150	247	253	229	229	111	k 1392	385	
John Vierra m	10.8R	1-3"	11	6	14	17	20	20	18	20	n 126	49	
Manuel Freitas	10.9L	1-12"		32	60	78	95	85	84	32	f 466	193	
R. E. Pruaao and John Vierra	10.9L	1-5" p 1-8" 1-12"	12	63	79	54	146	163	114	76	q 707	r 220	
M. Turner(s)	11.25R	1-2"				1	1	1	1		4	5	
Tony Vierra	11.6L	t 1-5" 1-8"	38	68	71	131	126	158	138	36	u 766	133	

a Of this acreage, 110 was double cropped.
b Additional acre-feet diverted: February 2 and November 39.
c Of this acreage, 40 was double cropped.
d Additional acre-feet diverted: January 2, February 1, November 13, and December 11.
e Previously liated as Salvador De Angelis.
f Additional acre-feet diverted: November 4.
g Additional acre-feet diverted: November 226 and December 3.
h Of this acreage, 173 waa double cropped. Includea 1,010 acres which also received an undetermined amount of East Side Canal water.
i Additional acre-feet diverted: November 1.
j Of this acreage, 31 was double cropped.
k Additional acre-feet diverted: November 3 and December 4.
m Previously listed as Jack Vierra.
n Additional acre-feet diverted: February 1 and November 5.
p One 8" unit was installed in 1955.
q Additional acre-feet diverted: November 57.
r Of this acreage, 125 was double cropped.
s Installed prior to 1955. Not previously listed.
t Replaces a 6" unit.
u Additional acre-feet diverted: January 9, February 11, November 7, and December 1.

TABLE 197

DIVERSIONS AND ACREAGES IRRIGATED - MERCED RIVER - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar. - Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
J. R. Silva	11.6L	1-12"	48	62	129	66	153	84	71		613	149	
--MILLIKEN BRIDGE--	11.65												
M. Turner	11.7R	1-4"				NO DIVERSION							
E. and J. Gallo Winery Ranch	12.35L	1-10"	3								3	a	
Soren Husman	12.4L	1-6"	13	5	11	18	23	24	23	5	122	b 40	
M. Turner	12.8R	c 1-12"	5	8		9	11	17		1	51	30	
E. and J. Gallo Winery Ranch	12.85L	1-10" 1-12"	62	260	44	224	275	186	29		d 1080	a 420	
M. Turner	13.4R	1-4"				PLANT REMOVED							
Anthony C. Pires	14.3R	1-6"	3	1	6	13	13	10	10		56	51	
J. M. Souza	14.5L	1-10"	14	24	47	58	53	57	43	25	e 321	f 87	
Anthony C. Pires	14.8R	1-6"		3	5	10	11	10	2		41	29	
J. E. Gallo(g)	14.85L	h 1-4"			3	3					6	55	
C. Koehn(i)	14.8L	1-5"				NO DIVERSION							
Anthony C. Pires	15.4R	1-6"			12	3	12	11	1		39	24	
A. H. Stafford(j)	16.2R	1-7"			9	20	25	21	16	7	98	38	
E. and J. Gallo Winery Ranch	16.5L	1-10"	39	125	43	145	210	127			k 689	m 300	
--RECORDING GAGE--	16.55												
C. J. Carpenter	17.05L	1-7"	14	5	14	18	19	22	19	3	n 114	42	
Ervey Schmidt	17.7L	1-5"	6	10	6	23	18	24	19	4	110	p 26	
S. Magsalay(q)	18.1R	1-6"		1	2	25	21	17	3		69	36	
J. H. Thomas	18.4L	1-6"	7	7	9	22	26	26	20	15	r 132	s 34	
C. P. Hicke	18.5L	1-4"	2	4	5	12	10	12	10	5	r 60	t 24	
H. L. Waters and W. Odell(u)	18.6R	v 1-5"		6	7	7	7	7	6		40	15	
H. L. Waters and W. Odell(u)	19.3R	w 1-6"		7	11	12	12	12	6		60	21	
S. P. Magsalay	19.8L	1-6"	7	14	5	3	6	1	12	1	e 49	x 20	
J. Francis(y)	19.8L	1-6"		5	9	10	14	26	1	6	z 71	18	
H. A. Jones(u)	20.3R	1-6"		3	9	3	1				16	14	
J. E. Gallo(aa)	20.4L	1-7"		13	28	46	27	23	11		148	ab 109	
G. L. Carlson	20.6R	1-6"		6	13	21	24	18	14	8	104	t 35	
--U. S. HIGHWAY 99 BRIDGE--	21.04												
--SOUTHERN PACIFIC RAILROAD BRIDGE--	21.05												
A. C. Jorgensen #1	21.05R	1-6"		5	6	10	7				28	ac 28	
A. C. Jorgensen #2	22.2R	1-10" 1-16"	131	136	93	174	175	146	132	14	ad 1001	ae 204	
A. C. Jorgensen #3	22.8R	1-12" 1-15"	69	9	69	111	135	134	129	25	af 681	ag 189	
A. C. Jorgensen #4	23.6R	1-8"				NO DIVERSION							
C. H. Passadori, Jr.	24.2R	1-6"	5	16	3	34	36	32	49	7	ah 182	ai 56	
T. Nishihara	24.3R	1-5"				PLANT REMOVED							
Leonard Aue(aj)	24.5L	1-6"	34	33	10	3	10	3	18		111	35	
T. Nishihara	24.6R	1-6"				NO DIVERSION							
T. Nishihara	25.0R	1-5"		7	4	7	11	7	9		45	30	
T. Nishihara	25.5R	1-6"		9	21	10	39	9	20		108	ae 55	

a Combined acreage for Miles 12.35L and 12.85L. Includes 160 acres which also received an undetermined amount of well water.
b Of this acreage, 18 was double cropped.
c Previously listed as a 14" unit.
d Additional acre-feet diverted: November 160 and December 167.
e Additional acre-feet diverted: November 1.
f Of this acreage, 13 was double cropped.
g New installation in 1955.
h This is a portable unit which diverts water at Miles 14.85L, 15.60L, and 16.22L.
i Previously listed as Conie Koehn.
j Previously listed as Frank Bello.
k Additional acre-feet diverted: November 120 and December 101.
m Includes 150 acres which also received an undetermined amount of well water.
n Additional acre-feet diverted: November 4.
p Includes 12 acres of Carpenter lands. Of this acreage, 4 was double cropped.
q Formerly listed as E. C. Millhous.
r Additional acre-feet diverted: November 3.
s Of this acreage, 9 was double cropped.
t Of this acreage, 7 was double cropped.
u Formerly listed as John Francis.
v Replaces a 6" unit.
w Replaces a 5" unit.
x Of this acreage, 11 was double cropped.
y Formerly listed as Howard A. Jones.
z Additional acre-feet diverted: November 6.
aa Formerly listed as H. P. Juneman.
ab This acreage also received an undetermined amount of well water.
ac This acreage was double cropped.
ad Additional acre-feet diverted: February 1.
ae Of this acreage, 12 was double cropped.
af Additional acre-feet diverted: February 4.
ag Of this acreage, 22 was double cropped.
ah Additional acre-feet diverted: November 9.
ai Includes 18 acres of Nishihara lands. Of this acreage, 28 was double cropped.
aj Formerly listed as Helen Varnum.

TABLE 197

DIVERSIONS AND ACREAGES IRRIGATED - MERCED RIVER - 1955 (contd.)

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Merced River Farms Association	26.3R	1-8"	40	67	44	128	120	106	72	26	a 603	b 103	
W. C. Magneson	26.55R	1-5" 1-6"	5	5	23	43	28	35	23	17	179	51	
Joseph Vierra	26.8L	c 1-10"				22	16		44		82	d 173	
--SANTA FE RAILROAD BRIDGE--	27.05												
W. C. Magneson	27.5R	1-10"		10	88	25	89	118	48		378	e 104	
--GAGING STATION - MERCED RIVER AT CRESSY BRIDGE--	27.6												
T. Nishihara	27.8R	1-6"		7	1	29	19	20	11	1	88	f 23	
Al and Harriet Wentzel(h)	27.85L	1-1½"						3	3		6	5	
M. Uyekubo	28.1R	1-5"		2	4	5	7	6	5	3	g 32	f 19	
John Faria(i)	28.4R	1-5"			10	10	8	3	9		40	18	
J. Campadonica	28.6R	1-6"			3	3	8	5	4	4	27	14	
Oliver Alves	28.6R	1-8"			18	55	24	32	53		182	71	
Anthony Demchille	29.1R	1-7"				44	45		33	12	134	68	
Anthony Demchille	29.75R	1-6"				24	15	14	13		66	19	
Manuel Silva (High Lift)	29.9R	1-6"				NO DIVERSION							
Manuel Silva (Low Lift)	29.9R	1-6"				37	32	30	22		121	60	
Frances I. Rose(j)	30.7L	1-6"		30	37	34	45	31	31	16	224	51	
Manuel Silva	30.95R	1-12"		58	7	69	115	194	28		471	175	
W. F. Bettencourt(j)	31.1L	1-8"	7	42	17	106	91	39	87	8	397	63	
Manuel Silva	31.5R	1-6"	1	16	61	94	66	146	155	14	553	40	
Albert Chavas	31.6R	1-6"				NO DIVERSION							
P. Halaris(k)	32.3L	1-8"					74	48	55		m 177		
--SOUTHERN PACIFIC RAILROAD BRIDGE (OAKDALE BRANCH)--	32.52												
Albert Chavas	33.1R	1-6"	19	39	53	74	87	79	59	3	413	n 100	
Evan Spiva(p)	33.2L	1-4"	3	3	3	11	32	7	22	7	q 88	11	
Albert Chavas	33.55R	1-6"			30	14	52	14	20		130	80	
W. F. Bettencourt, P. Halaris, and Cowel Land and Cement Company	36.9L	Gravity		530	796	1207	1171	1230	762	147	r 5843	m,s 804	
Reinero Brothers	39.1L	1-6"				PLANT REMOVED							
Reinero Brothers	39.2L	1-6"				8	13				21	47	
E. M. Davis	40.2L	t 1-3"	16	29	27	59	59	75	43		308	50	
--GAGING STATION - MERCED RIVER BELOW SNELLING--	42.1												
MERCED RIVER MOUTH TO SNELLING													
Totals			985	2814	3379	5296	6086	6044	4374	1356	30334	8580	0
Average cubic feet per second			16	47	55	89	99	98	74	22	62		
Monthly use in per cent of seasonal			3.2	9.3	11.1	17.5	20.1	19.9	14.4	4.5			

a Additional acre-feet diverted: November 13.
b Of this acreage, 4 was double cropped.
c Replaces an 8" unit.
d This acreage also received an undetermined amount of water from the Merced Irrigation District.
e Of this acreage, 27 was double cropped.
f Of this acreage, 12 was double cropped.
g Additional acre-feet diverted: February 1.
h New installation in 1955.
i Previously listed as John Farie.
j Formerly listed as Rose and Shaffer.
k Not previously listed.
m Two hundred fifty five acres listed for Mile 36.9L also received 177 acre-feet of water from Mile 32.3L.
n Of this acreage, 55 also received an undetermined amount of Dry Creek water.
p Previously listed as Ivan Spiva.
q Additional acre-feet diverted: November 2.
r Additional acre-feet diverted: November 57.
s Of this acreage, 117 was double cropped.
t Replaces a 4" unit.

TABLE 198

DIVERSIONS AND ACREAGES IRRIGATED - TUOLUMNE RIVER - 1955

Water User	Mile and Bank Above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
E. T. Mapes	0.4R	1-4"	97	28	57	52	61		50	89	s 434	300	
E. T. Mapes	1.3R	1-20"	487	84	318	575	577	675	219	48	b 2983	c 2902	
J. V. Steenstrup Estate(d)	1.9L	1-12"	83	162		66	222	109	100	28	770	e 188	
J. DeSouza and J. B. Silva	2.2R	1-6"		14	9	40	44	50	20		177	65	
J. V. Steenstrup Estate(d)	2.9L	f 1-12"	172	270	4	335	268	456	216	85	1806	g 364	
--OAGINO STATION - TUOLUMNE RIVER AT TUOLUMNE CITY--	3.35												
Russell Murray	3.4L	1-5"	4	11	31	21	16	7	9		99	18	
Bancroft Fruit Farms	4.1R	1-12"		49	32	46	43	51	44	3	268	72	
Bancroft Fruit Farms	5.0R	1-10"	13	48	84	106	111	105	58	12	h 537	165	
Western Farms(i)	6.3L	1-16"			30	17	22	30	35	21	155	65	
R. L. Maxfield	6.9R	1-7"	10	18	22	44	56	43	24	13	230	41	
Eugene Boone, Oalen Hartwich, and Tony Lemos	7.1R	1-10"	123	18	117	157	126	111	60	67	j 779	160	
W. F. Duffy	7.2R	1-7"	3	50	44	26	26	24	34		207	43	
Ella T. Rahilly	7.8L	1-10"		30	52	48	40	17	14	19	220	k 43	
W. F. Duffy	8.4R	1-10"	52	63	101	91	82	128	75	53	645	m 101	
Ella T. Rahilly	8.5L	1-10"		22	40	42	30	44	20	17	215	82	
A. C. Watkins	9.4L	1-12"		90	18	40	82	88	47	74	n 439	90	
McClure Ranchea(i)	9.7R	1-12"					40	7	55	21	123	53	
Tuolumne Cooperative Farms, Inc.	10.2R	1-14"	63	44	71	74	130	110	103	55	p 650	q 121	
C. B. and L. D. Fodesto	15.75R	1-3"		8	2	5	3	6			24	24	
--SOUTHERN PACIFIC RAILROAD BRIDGE--	15.8												
--U. S. HIGHWAY 99 BRIDGE--	16.05												
--OAGINO STATION - TUOLUMNE RIVER AT MODESTO--	16.05												
--DRY CREEK--	16.5R												
Jack Gardella(r)	20.3R	1-10"	26	25	29	54	64	50	41	34	s 323	t 70	
L. J. Foit	20.4L	1-5"				PLANT REMOVED							
Charlea N. Whitmore(i)	20.45L	1-6"	7	8	10	10	15	12	5	3	u 70	15	
H. W. Ortman	20.5R	1-12"	33		13	38	35	53	18	12	202	q 81	
--SANTA FE RAILROAD BRIDGE--	21.6												
O. R. Trent	23.5R	1-1½" 1-6"	3	5	20	14	15	37	16	16	126	v 38	
C. S. Blakesley	23.6R	1-6"	3	4	4	7	10	5	2	2	37	16	
M. A. Goodman and Sons	25.6R	1-2"				NO DIVERSION							
L. B. and J. H. Fox	25.8L	1-3"	7	8			14				29	w 85	
H. W. Low	26.6L	1-4"	8	13	15	21	21	23	24	10	135	x 60	
H. W. Low	27.0L	1-4"	13	16	26	30	24	25	27	12	173	50	
Paul J. Ferguaon	27.3R	1-10"	10		19	23	6	21	8		87	y 19	
B. and L. Ranch	27.9R	1-12"	4	11	12	16	11	13	5	5	77	40	
Ronald R. Painter	28.3R	1-7"				6	4	4			14	28	
Michel Investment Company	28.8R	z 1-8"		118	54	134	98	81	89	27	601	aa 110	
E. B. and D. V. Butterfield	29.4R	1-10"			1	23	2	13			39	60	
J. W. and Lola May Short	29.4L	1-7"				NO DIVERSION							
Pirpo Ranch	30.2L	1-10"	7	24	13	38	45	51	28	38	ab 244	ac 95	

a Additional acre-feet diverted: February 6.
b Additional acre-feet diverted: January 1, February 2, and November 4.
c This acreage also received an undetermined amount of controlled drainage water from Modesto Irrigation District.
d Formerly listed as J. V. Steenstrup.
e Of this acreage, 67 was double cropped.
f One 10" and one 12" unit was removed in 1955.
g Of this acreage, 140 was double cropped and 64 also received an undetermined amount of controlled drainage water.
h Additional acre-feet diverted: January 1, February 4, and November 5.
i New installation in 1955.
j Additional acre-feet diverted: November 53.
k Of this acreage, 15 was double cropped
m Of this acreage, 46 was double cropped.
n Additional acre-feet diverted: November 13.
p Additional acre-feet diverted: January 2 and November 9.
q Of this acreage, 48 was double cropped.
r Formerly listed as Joseph Sanguinetti.
s Additional acre-feet diverted: February 1.
t This acreage also received an undetermined amount of drain water from Empire Sewer Farm.
u Estimated diversion
v Includes 15 acres of A. L. Lib lands. Of this acreage, 24 was double cropped.
w This acreage was double cropped.
x This acreage also received an undetermined amount of well water.
y Of this acreage, 9 was double cropped.
z A 12" unit was removed in 1955.
aa Of this acreage, 8 was double cropped.
ab Additional acre-feet diverted: November 7.
ac Of this acreage, 35 was double cropped.

TABLE 198

DIVERSIONS AND ACREAGES IRRIGATED - TUOLUMNE RIVER - 1955 (contd.)

Water User	Mile and Bank Above Mouth	Number and Size of Pump	Monthly Diversions in Acre-feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
W. C. Chase	30.4R	1-4"	1	1	1	1	1	1			b	4	
--SOUTHERN PACIFIC RAILROAD BRIDGE (OAKDALE BRANCH)--	31.5												
--GAGING STATION - TUOLUMNE RIVER AT HICKMAN BRIDGE--	31.7												
A. G. Laughlin	34.2R	1-6"				NO DIVERSION							
Donald Ketcham	38.4R	a 1-1½"	1	4	6	15	14	15	10	8	73	28	
A. E. Ketcham	39.4R	1-8"	18	14	15	42	60	70	31	37	287	b 59	
George H. Sawyer	39.8L	1-6"		20	16	40	70	59	31	18	254	c 356	
--GAGING STATION - TUOLUMNE RIVER AT ROBERTS FERRY BRIDGE--	39.9												
William J. Silva	43.3L	1-6"	7	5	1	23	12	11		3	d 62	16	
Curtner Zanker	45.7L	1-10"			36		126	76			e 238	f 98	
Dolling Brothers	46.3R	1-8"	6	50	66	98	102	104	75	48	g 549	50	
O. F. Fine(h)	46.7L	1-6"	5		5	9	12	9	6	1	e 47	14	
--GAGING STATION - TUOLUMNE RIVER AT LA GRANGE--	50.5												
Totals			1266	1335	1394	2427	2740	2794	1599	879	14434	6289	0
Average cubic feet per second			21	22	23	41	45	45	27	14	30		
Monthly use in per cent of seasonal			8.8	9.2	9.7	16.8	19.0	19.3	11.1	6.1			

a Replaces a 5" unit.
b Includes 5 acres of C. E. Ketcham lands.
c This acreage received an undetermined amount of well water. Of this acreage, 72 was double cropped.
d Additional acre-feet diverted: January 4.
e Additional acre-feet diverted: November 1.
f Includes 8 acres of O. F. Fine lands.
g Additional acre-feet diverted: November 22.
h New installation in 1955.

TABLE 199

DIVERSIONS AND ACREAGES IRRIGATED - DRY CREEK - 1955

Water User	Mile and Bank Above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Modesto and Arata	0.4R	1-6"		10	19	33	40	38	22		162	a 124	
--MODESTO-EMPIRE TRACTION COMPANY RAILROAD BRIDGE--	0.7												
--STATE HIGHWAY 132 BRIDGE (YOSEMITE BOULEVARD)--	0.8												
--LA LOMA BOULEVARD BRIDGE--	1.2												
James L. Melrose #1	5.0L	1-3"		2	1	2	4		3		12	b 13	
--GAGING STATION - DRY CREEK NEAR MODESTO (CLAUSS ROAD BRIDGE)--	5.4												
--SANTA FE RAILROAD BRIDGE--	6.4												
--CHURCH STREET BRIDGE--	7.2												
--WELLS FORD ROAD BRIDGE--	8.7												
Charles J. and Frances E. Carroll	9.7R	1-1½"		1	2	3	3	4	4	1	18	3	
K. D. Weaver(d)	10.4R	1-6"				2	7	8	6	2	25	b 25	
Roy Brant	10.6R	1-5"				6	9	9			24	b 29	
--ALBERS ROAD BRIDGE--	11.0												
--MODESTO IRRIGATION DISTRICT CANAL CROSSING--	11.1												
Lucksinger Farms(e)	12.1R	1-6"				10	10				20	12	
John Luiz	12.6R	f 1-6"				32	59	58	45	76	g 270	h 115	
Lucksinger Farms(e)	12.7R	1-6"				16	12	7	12	5	52	i 32	

a This acreage also received an undetermined amount of controlled drainage water from Modesto Irrigation District.
b This acreage also received an undetermined amount of water from Modesto Irrigation District.
c Additional acre-feet diverted: November 1.
d New installation in 1955.
e Formerly listed as Lucksinger Brothers.
f Replaces a 4" unit.
g Additional acre-feet diverted: February 1 and November 14.
h Includes 15 acres of Lucksinger Farms lands. Of this acreage, 100 also received an undetermined amount of water from Oakdale Irrigation District.
i Of this acreage, 21 also received an undetermined amount of water from Oakdale Irrigation District.

ABLE

DIVERSIONS AND ACREAGES IRRIGATED - DRY REEK - ntd.

Water User	Mile and Bank Above Mouth	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
			Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
a Lucksinger Farms	1.4L	-				NO DIVERSION							
Earl R. Petersen	1.4L	-									11	18	
J. Fagundes	1.7R	1-1"	46	50	88	115	148	14	13	82	b 786	90	
M. H. French	1.2R	1-8"	3	4		4	5		6	3	69	10	
--OAKDALE-WATERFORD HIGHWAY BRIDGE--	2.1												
Totals			45	67	118	229		274	202	169	1	471	0
Average cubic feet per second			1	1	2	4	5		3	3			
Monthly use in per cent of seasonal			3.2	4.8	8.4	16.1	21.4	19.6	14.4	12.1			

a Formerly listed as Lucksinger Brothers.
b Additional acre-feet diverted: November 4.

TABLE c

DIVERSIONS AND ACREAGES IRRIGATED - STANISLAUS RIVER - 1955

Water User	Old Mile *	Mile and Bank Above Mouth*	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.- Oct. Acre-Feet	Acreage Irrigated	
				Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
Roy Mores a)	1.1R	0.3R	1-6"		26	23	23	23				95	30	
E. W. Hawkins	1.8R	0.9R	1-6"	21	14	11	36	24	32	6		b 144	c 36	
--GAGING STATION - STANISLAUS RIVER NEAR MOUTH--	2.9R	1.9R												
A. J. Chisholm and C. M. Carroll	2.95R	1.9R	1-16"	2	49	10	12	11	98	67		701	76	
C. M. Carroll	3.0R		1-6"				PLANT REMOVED							
C. C. Angyal	4.4R	2.4R	1-18"		173	52	293	263	421	172	63	1437	d 295	
Overton Ranch (D. F. Koetitz)	5.25L	3.4L	2-12"	136	312	501	705	760	810	534	354	4112	e 905	
Reclamation District 20b+	5.9R	4.0R	1-14" 1-16" 1-20"	621	856	1429	1809	1576	1569	1117	719	f 9690	g 1919	
Reclamation District 2075	5.95R	4.05R	2-16" 1-20"	1334	1411	2048	2823	2846	3072	2031	1153	h 16718	i 2933	
Louis W. Felucca	5.85L	4.8L	1-14"	17	5	15	7	8	14	-	8	81	50	
Henry Felucca	6.6L	5.5L	1-16"	61	71	96	139	93	175	76		711	180	
J. W. Updike	7.5L	5.8L	1-12"	-	10	26	19	16	32	17		127	34	
C. C. Updike	8.2L	6.4L	1-12"		18	1	21	8	30	23	17	118	95	
Ekelund Rip n Ranch	9.0R	8.4R	1-16"	111	95	269	334	424	317	205	72	1827	j 392	
N. E. Cannon	10.0R	8.7R	1-10"	61	89	104	229	283	239	130	57	k 1192	204	
D. F. Koetitz	10.1L	9.4L	1-10"	81	141	273	406	544	360	297	265	2167	370	
--RECORDING GAGE--	10.2	9.5L												
John L. Hertle(m	10.5L	9.7L	1-10"	3	49	40	44	55	46	37	10	293	n 57	
E. Bahlen and P. Upchurch		10.0R	1-16"		43	10	52	124	190	5		430	92	
G. S. Tornell	13.2R	11.0R	1-12"		4		24	43	28			99	q 40	
Dick Bush		12.4L	1-1½"			2	3	3	4	3	1	16	7	
R. E. Kierburg	13.9R		1-8"				PLANT REMOVED							
--GAGING STATION - STANISLAUS RIVER NEAR RIPON--	14.9	13.L												

* Mileages [illegible] Stanislaus River were revised [illegible] and the new mileages listed under "Mile and Bank Above Mouth." The figures under "Old Mile" are the mileages assigned previously.
a Formerly listed as A. S. Maciado.
b Additional acre-feet diverted: February 4.
c Of this acreage, [illegible] was double cropped.
d Irrigation water which also received an undetermined amount of water from Mile 4.3R. Of this acreage, 4 was double cropped.
e This acreage also received an undetermined amount of water from Modesto Irrigation District.
f Formerly irrigated from Mile 4.8R also received an undetermined amount of water from Modesto Irrigation District. Additional acre-feet diverted: [illegible].
g Of this acreage, 105 was double cropped.
h Additional acre-feet diverted. November [illegible].
i Of this acreage, 54 was double cropped.
j Of this acreage, 32 was double cropped.
k Additional acre-feet diverted: January 1 and February 1.
m Formerly listed as Joseph Hertle.
n Of this acreage, 32 was double cropped.
p New installation in 1955.
q This acreage was double cropped.

TABLE 200

DIVERSIONS AND ACREAGES IRRIGATED - STANISLAUS RIVER - 1955 (contd.)

Water User	Old Mile *	Mile and Bank Above Mouth*	Number and Size of Pump	Monthly Diversions in Acre-Feet								Total Diversion Mar.-Oct. Acre-Feet	Acreage Irrigated	
				Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		General	Rice
--SOUTHERN PACIFIC RAILROAD BRIDGE--	15.9	15.7												
--U. S. HIGHWAY 99 BRIDGE--	16.0	15.7												
A. Girardi	17.0L	17.7L	1-16"	1	14	141	61	74	130		13	434	a 318	
E. J. Freethy	18.8R	19.0R	1-14"	29	39	76	120	166	190	2		622	b 180	
E. J. Freethy	19.4R	19.5R	1-3" 1-4"				NO DIVERSION							
Allen Ranch	20.75R	20.9R	1-14"	68	150	152	200	312	352	328	265	c 1827	d 400	
Heath Ranch	20.9L	21.2L	1-5"	7	7	33	31	36	30	16	17	177	14	
Newton Heisinger(e)	21.6R	21.9R	1-6"				NO DIVERSION							
Newton Heisinger(e)	21.75R	22.3R	1-10"	18	11	23	35	46	41	44	11	229	f 65	
Ruth M. Ladd	23.4L	24.2L	1-4"			9	8	8	9			34	23	
--MODESTO-ESCALON HIGHWAY BRIDGE--	28.15	29.5												
--SANTA FE RAILROAD BRIDGE--	31.85	33.4												
--GAGING STATION - STANISLAUS RIVER AT RIVERBANK--	32.0	33.6												
O. B. Trette	32.1R		1-2" 1-4"				PLANT REMOVED							
R. P. Barton	34.1R		1-6"				PLANT REMOVED							
R. P. Barton	34.6R	36.2R	1-7"	1	2	1	30	29	36	5		104	160	
Oakdale Irrigation District (Crawford Pump)	35.9L	g 37.7L	1-14"	98	169	126	271	341	294	80	31	h 1410	i 574	
Oakdale Irrigation District (Brady Pump)	37.0L	g 39.1L	1-12"	82	80	18	157	160	152	110	15	774	j 468	
--OAKDALE-STOCKTON HIGHWAY BRIDGE--	38.9	41.2												
--SOUTHERN PACIPIC RAILROAD BRIDGE (OAKDALE BRANCH)--	39.0	41.2												
--GAGING STATION - STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE--	44.7	47.0												
Harry Himes	46.1L	49.2L	k 1-5"	8	14	22	22	17	1			84	38	
J. S. Harden(m)	46.8L	50.5L	1-6"	6	12	13	24	19	22	20	14	130	41	
Walter B. Wilms	47.5L	52.0L	1-10"	14	13	31	54	54	52	50	39	n 307	44	
--KNIGHTS FERRY BRIDGE--		54.5												
Totals				2812	3877	5658	8105	8267	8757	5413	3197	46086	10040	0
Average cubic feet per second				46	65	92	136	134	142	91	52	95		
Monthly use in per cent of seasonal				6.1	8.4	12.3	17.6	17.9	19.0	11.8	6.9			

* Mileages on the Stanislaus River were revised in 1955 and the new mileage is listed under "Mile and Bank Above Mouth." The figures under "Old Mile" are the mileage listings prior to 1955.

a Includes 155 acres which also received an undetermined amount of Modesto Irrigation District water.

b Of this acreage, 45 was double cropped.

c Additional acre-feet diverted: January 14, February 3, and November 30.

d Includes 130 acres which also received an undetermined amount of South San Joaquin Irrigation District water.

e Formerly listed as B. Bonora.

f Of this acreage, 20 was double cropped. This acreage also received an undetermined amount of well water.

g Oakdale Irrigation District for season of 1955 maintained plants at Mile 37.7L and 39.1L to supplement the District gravity supply.

h Additional acre-feet diverted: November 9.

i This acreage also received an undetermined amount of water from Mile 58.6L. Of this acreage, 252 was double cropped.

j This acreage also received an undetermined amount of water from wells and Mile 58.6L. Of this acreage, 100 was double cropped.

k Replaces a 6" unit.

m Formerly listed as J. H. Anderson.

n Additional acre-feet diverted: January 1 and November 3.

TABLE 201

DIVERSIONS AND ACREAGES IRRIGATED - TULE RIVER - 1955

Water User	Mile and Bank e	Number and Size of Pump	Monthly Diversions in Acre-Feet											Total Diversion Jan.- Dec.	Acreage Irrigated	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Acre-Feet	General	Rice
Pioneer Ditch	0.3R	Gravity	539	11	528	776	1166	1210	238				150	294	5592	a 2236	
--GAGING STATION - TULE RIVER AT WORTH RIDGE--	2.2																
Campbell-Moreland Ditch	3.2L	Gravity	110	210	734	706	1740	1079	77				468	785	b 7678	a 1099	
Porter Slough	3.2R	Gravity	1080	1217	231	114	324							1474	c 4430	d	
Porter Slough Ditch	e 3.2R	Gravity		13	448	255	749								1509	f 765	
Vandalia Ditch	3.9L	Gravity	349	341	210	132	292	112							1429	g 1388	
--SANTE FE RAILROAD BRIDGE--	5.9																
Poplar Ditch	6.0L	Gravity		754	696	1813	4943	171							10777	f,h 4508	
--STATE HIGHWAY 65 BRIDGE--	6.7																
--SOUTHERN PACIFIC RAILROAD BRIDGE--	8.8																
Hubbs-Miner Ditch	9.2R	Gravity	90	555	645	741	1331	745							1 4312	f,j 2164	
Rhodes-Pine Ditch	9.2L	Gravity				146	323	46							515	f 998	
--OLIVE AVENUE BRIDGE--	10.7																
--FRIANT-KERN CANAL CROSSING--	11.3																
Woods Central Ditch k	11.1L	Gravity		27	73		604								m 704		
--ROCKFORD AVENUE BRIDGE--	12.6																
--HUBBS- INER SPILL--	12.9R																
Little Pioneer Ditch	15.0L	Gravity						n NO DIVERSION									
-OTTLE BRIDGE--	15.2L																
Totals			1221	4517	5073	4670	11618	3363	315	0	0	0	618	2553	36940	13158	0
Average cubic feet per second			52	81	99	78	189	57	5	0	0	0	10	42	51		
Monthly use in per cent of seasonal			3.7	12.2	16.4	12.6	31.5	9.1	0.9	0	0	0	1.7	6.9			

e Mileage downstream from junction with South Fork Tule River.
a This acreage also received an undetermined amount of well water.
b Includes an undetermined amount of water served to Vandalia Irrigation District and Porterville State Hospital well fields.
c This figure is the measured flow at the head of Porter Slough minus the diversion of Porter Slough Ditch.
d Use other than replenishing ground water is ineligible.
e Point of diversion is on Porter Slough, 4.5 miles below head.
f This acreage also received an undetermined amount of water from wells and the Friant-Kern Canal.
g This acreage also received an undetermined amount of water from wells and Campbell-Moreland Ditch via well fields.
h Includes acreage as follows: Porterville Irrigation District - 3053, Lower Tule River Irrigation District - 1135, and Saucelito Irrigation District - 320.
i Includes 999 acre-feet of spill to Tule River at Mile 12.9R as follows: February 212, March 221, April 135, May 401, and June 30.
j Includes 1884 acres in the Hubbs-Miner Ditch Company and 280 acres in the Gilliam-McGee Ditch Company.
k Reinstallation in 1955 of a plant previously removed.
m Water was served to acreage of the Lower Tule River Irrigation District.
n Ditch was used in 1955 to redivert water originating in the Friant-Kern Canal.

TABLE 202

EXPORTATIONS FROM SACRAMENTO-SAN JOAQUIN DELTA - 1955

Water User	Mile & Bank	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
							Cache Slough							
City of Vallejo														
Total acre-feet diverted		678	606	708	752	1084	1308	1137	1343	1143	915	637	467	10778
Average cubic feet per second		11	11	12	13	18	22	18	22	19	15	11	8	15
Monthly diversion in % of seasonal		6.3	5.6	6.6	7.0	10.1	12.1	10.5	12.5	10.6	8.5	5.9	4.3	
							Old San Joaquin River							
Contra Costa Canal	30.5L													
Total acre-feet diverted		1886	2137	2404	4466	4366	6320	6433	6234	5837	3652	3122	2493	49350
Average cubic feet per second		31	38	39	75	71	106	105	101	98	59	52	41	68
Monthly diversion in % of seasonal		3.8	4.3	4.9	9.1	8.9	12.8	13.0	12.6	11.8	7.4	6.3	5.1	
Delta-Mendota Canal	44.6L													
Total acre-feet diverted		563	20267	96472	131247	146073	183741	190659	184258	108460	69041	20846	8499	1160126
Average cubic feet per second		9	365	1569	2206	2376	3088	3101	2997	1823	1123	350	138	1602
Monthly diversion in % of seasonal		0.1	1.7	8.3	11.3	12.6	15.8	16.4	15.9	9.4	6.0	1.8	0.7	

TABLE 203

DIVERSIONS AND ACREAGES IRRIGATED - EAST SIDE CANALS AND IRRIGATION DISTRICTS - 1955

Water User	Mile and Bank	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Acreage Irrigated General	Acreage Irrigated Rice
								San Joaquin River								
Friant-Kern Canal	269.63L															
Total acre-feet diverted		153	11839	87015	77125	64015	134678	166887	156912	74396	27907	10471	173	811571		
Average cubic feet per second		2	213	1415	1296	1041	2263	2714	2552	1250	454	176	3	1121		
Monthly diversion in % of seasonal		0	1.5	10.7	9.5	7.9	16.6	20.6	19.3	9.2	3.4	1.3	0			
Madera Canal	269.63R															
Total acre-feet diverted		0	817	18706	10200	12192	37164	53302	52112	34351	0	0	0	218844		
Average cubic feet per second		0	15	304	171	198	625	867	847	577	0	0	0	302		
Monthly diversion in % of seasonal		0	0.4	8.5	4.7	5.6	17.0	24.3	23.8	15.7	0	0	0			
								Merced River								
Merced Irrigation District	46.0															
Main Canal		0	0	15777	61516	62675	94351	97751	93591	39664	0	0	0	a 465325	b 102150	4555
Northside Canal		0	0	837	2317	2876	4324	4084	4284	2192	607	119	44	21684	4067	0
Total acre-feet diverted		0	0	16614	63833	65551	98675	101835	97875	41856	607	119	44	487009	106217	4555
Average cubic feet per second		0	0	270	1073	1066	1658	1656	1592	703	10	2	1	673		
Monthly diversion in % of seasonal		0	0	3.4	13.1	13.5	20.3	20.9	20.1	8.6	0.1	0	0			
								Tuolumne River								
Turlock Irrigation District	51.5L															
Total acre-feet diverted		20340	12570	62620	58390	59990	83760	85150	76290	62540	11050	14320	13580	c 560600	d 168070	0
Average cubic feet per second		331	226	1018	981	976	1408	1385	1241	1051	180	241	221	774		
Monthly diversion in % of seasonal		3.6	2.2	11.2	10.4	10.7	14.9	15.2	13.6	11.2	2.0	2.6	2.4			
Modesto Irrigation District	51.5R															
Total acre-feet diverted		1230	17	21935	37287	30283	42233	44110	35834	23563	7186	5664	8347	e 257689	f 68623	398
Average cubic feet per second		20	0	357	627	492	710	717	583	396	117	95	136	356		
Monthly diversion in % of seasonal		0.5	0	8.5	14.5	11.8	16.4	17.1	13.9	9.1	2.8	2.2	3.2			
Waterford Irrigation District	51.5R															
Total acre-feet diverted		0	0	2107	3285	4461	6489	5933	5537	4329	1887	0	0	34028	g 7172	0
Average cubic feet per second		0	0	34	55	73	109	96	90	73	31	0	0	47		
Monthly diversion in % of seasonal		0	0	6.2	9.7	13.1	19.1	17.4	16.3	12.7	5.5	0	0			
								Stanislaus River								
Oakdale Irrigation District	58.6															
Northside Canal		0	0	4073	7203	14949	17055	13375	11785	3240	413	154	0	72247	h 20468	2039
Southside Canal		0	0	7552	15052	23754	28229	22316	20303	4223	0	0	0	121429	j 34511	436
Total acre-feet diverted		0	0	11625	22255	38703	45284	35691	32088	7463	413	154	0	193676	k 54979	2475
Average cubic feet per second		0	0	189	374	629	761	580	522	125	7	3	0	268		
Monthly diversion in % of seasonal		0	0	6.0	11.5	20.0	23.4	18.4	16.6	3.8	0.2	0.1	0			
South San Joaquin Irrigation District	58.6R															
Total acre-feet diverted		12062	9861	9556	38967	38159	45274	35606	32029	10531	4909	2135	4757	m 243846	n 62237	0
Average cubic feet per second		196	178	155	655	621	761	579	521	177	80	36	77	337		
Monthly diversion in % of seasonal		4.9	4.0	3.9	16.0	15.7	18.6	14.6	13.1	4.3	2.0	0.9	2.0			
								American River								
Natomas Water Company (p)	28.8L															
Total acre-feet diverted					1240	2930	2210	2390	2340	2160	1620	1080	750	16720		
Average cubic feet per second					49	48	37	39	38	36	26	18	12	33		
San Juan Suburban Water District (p)	28.8R															
Total acre-feet diverted					710	2330	3420	3700	3750	3230	2540	1740	880	22300		
Average cubic feet per second					28	38	57	60	61	54	41	29	14	44		

a An additional 138649 acre-feet of water was pumped from wells.
b Includes double-cropped acreage.
c An additional 125161 acre-feet of water was pumped from wells.
d Of this acreage, 19698 was double cropped.
e An additional 106259 acre-feet of water was pumped from wells.
f Of this acreage, 8753 was double cropped.
g Of this acreage, 239 was double cropped.
h Of this acreage, 293 was double cropped.
j Of this acreage, 540 was double cropped.
k Includes 1042 acres listed for Miles 35.9L and 37.0L on the Stanislaus River. This acreage also received 51057 acre-feet of water from wells and controlled drainage.
m An additional 16677 acre-feet of water was pumped from wells.
n This acreage also received an undetermined amount of controlled drainage water from Oakdale Irrigation District. Of this acreage, 4778 was double cropped. Includes 2908 acres served by subirrigation.
p New installation in 1955. This diversion officially started receiving water on April 18, 1955.

TABLE

DELIVERIES FROM CENTRAL VALLEY PROJECT CANALS - 1955
(The following table arranged from data furnished by U. S. Bureau of Reclamation)

Water User	Mile Post From	Mile Post To	Deliveries in Acre-Feet Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Contra Costa Canal															
Contra Costa County Water Dist. Industrial and Municipal			1634	1589	2122	3634	3031	4228	4193	4547	4481	2696	2702	2149	37106
Agricultural			43	13	40	329	704	1381	1578	936	572	530	104	54	6284
Total			1677	1602	2162	3963	3735	5609	5771	5583	5053	3226	2806	2203	43390
Delta-Mendota Canal															
Plain View Water District	8.51	20.00	0	15	699	1484	1466	2852	2984	2930	1527	684	93	2	14736
Hospital Water District	18.05	30.96	0	36	1563	2606	2400	4109	4562	3804	2482	1080	66	0	22708
West Stanislaus Irr. Dist.	31.31		0	0	0	2497	0	2447	3719	2630	0	0	0	0	11293
Kern Canon Water District	31.31	35.18	0	0	282	977	680	1165	1433	1029	551	110	10	0	6237
Del Puerto Water District	35.73	42.08	0	81	814	1483	1131	1855	1821	1520	805	221	161	15	9907
Patterson Water District	42.51		0	0	0	255	445	459	206	404	170	3	0	0	1942
Salado Water District	42.10	46.00	0	0	743	1243	498	1054	1603	778	421	31	9	0	6380
Sunflower Water District	44.23	52.02	0	10	680	1609	697	1674	2012	1648	662	187	39	0	9218
Orestimba Water District	46.83	50.66	0	0	215	1411	692	1243	1483	662	159	23	0	0	5888
Foothill Water District	51.65	57.46	0	5	402	720	563	938	1203	915	127	115	4	5	4997
Davis Water District	45.19	56.82	0	0	55	232	296	349	456	375	17	0	0	0	1780
Mustang Water District	56.80	62.67	0	0	0	56	266	887	633	663	444	49	0	0	2998
Quinto Water District	64.28	67.55	0	0	37	187	444	339	531	499	133	0	0	0	2170
Romero Water District	66.70	68.03	0	6	125	182	322	240	311	279	225	63	9	0	1762
San Luis Water District	69.21	90.57	0	225	1452	1522	1492	2138	2744	2981	1021	511	402	80	14568
Panoche Water District	93.25		0	1943	7201	6871	4318	8096	8875	8285	3946	2975	1295	75	53880
Eagle Field Water Association	94.26		0	0	0	118	9	248	172	258	12	0	0	0	817
West Side Golf Association	95.95		0	0	4	8	12	18	19	18	15	10	3	0	107
Oro Loma Water District	96.62		0	0	171	802	379	785	626	574	50	191	99	0	3077
Widren Water Users Association	102.03		0	0	0	80	294	298	266	245	171	51	0	25	1430
Total			0	2321	14443	24343	16404	31194	35659	30497	12938	6304	2190	202	176495
* Net Deliveries, Delta-Mendota Canal to Mendota Pool			0	12934	79524	103982	123962	149138	153011	150663	95447	57896	18383	9435	954375
Madera Canal															
Madera Irrigation District	6.1	32.2	0	0	6573	6143	4786	20728	28519	26704	18308	371	10	278	112420
Adobe Ranch	20.0		0	0	0	0	0	36	38	0	95	175	109	184	637
Chowchilla Water District	35.9		0	0	9019	5385	5709	14973	24272	26026	16126	0	0	0	101512
Total			0	0	15592	11528	10495	35737	52829	52730	34531	546	119	462	214569
Friant-Kern Canal															
Round Mountain Ranch	20.22		0	0	2	5	11	18	18	24	16	12	8	0	114
Alta Irrigation District	28.52		0	0	0	0	0	0	0	0	0	0	1462	0	1462
Orange Cove Irr. Dist.	35.00	54.30	0	40	236	2622	2291	5336	6361	6323	3717	1438	521	0	28885
City of Orange Cove	43.44		0	6	4	5	14	25	27	30	23	19	9	1	163
Stone Corral Irr. Dist.	56.90	64.40	0	0	115	940	619	1492	1942	2192	1131	208	89	0	8728
Ivanhoe Irr. Dist.	65.04	69.08	0	0	222	1565	1246	2838	3259	3259	1954	688	230	0	15261
Tulare Irr. Dist.	68.14	71.29	0	0	23606	16816	9132	30096	36893	36893	5552	0	0	0	158988
Exeter Irr. Dist.	72.52	80.63	0	2	109	1166	1317	2434	2694	2702	1858	724	200	0	13206
Lindmore Irr. Dist.	81.17	93.20	0	99	2364	5802	5109	8950	9812	10181	6173	2799	1089	0	52378
Lindsay-Strathmore Irr. Dist.	85.56		0	93	490	2545	2821	3886	4259	4374	3570	2267	1020	59	** 25384
Porterville Irr. Dist.	92.12	98.13	0	157	288	522	167	1198	1160	629	363	234	6	0	4724
Lower Tule Irr. Dist.	94.92	98.62	0	0	28187	16320	18681	34080	49254	42252	19026	3898	0	0	211 93
Saucelito Irr. Dist.	98.02	107.37	0	16	1674	3554	1960	3664	6117	6565	4596	1218	16	0	29380
Terra Bella Irr. Dist.	102.65		0	0	20	746	379	1273	1577	1513	1127	688	276	0	7599
Delano-Earlimart Irr. Dist.	107.65	119.47	0	1444	14599	14513	12111	21444	23387	20960	13182	6486	5637	1954	135717
[illegible]	117.96		0	300	0	0	0	0	0	0	0	0	36	0	336
San Joaquin U. D.	120.07	128.05	0	438	11939	10290	8815	17730	19583	19526	11488	4266	1589	226	105890
Pacific Gas and Electric Co.	151.80		0	0	0	0	0	50	444	301	71	0	71	226	1163
Total			0	2595	83855	77411	64473	134514	166787	157724	73847	24945	12259	2466	801071

* Includes transported water from Wutchumne Ditch.
** From head of canal.
* This item does not include deliveries to Panoche Water District etc., via Mendota Pool and C.C.I.D. outside canal.

TABLE 205

AVERAGE MONTHLY DIVERSIONS IN PER CENT OF SEASONAL FOR SACRAMENTO AND SAN JOAQUIN VALLEY STREAMS

	Period of Record	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
SACRAMENTO VALLEY									
Sacramento River - Redding to Sacramento	1946 to 1955	0.7	8.9	17.7	18.3	20.7	19.4	10.4	3.9
Feather River - Oroville to Mouth	1946 to 1955	0.3	6.8	18.9	19.7	20.3	18.0	10.7	5.3
Yuba River - Smartville to Mouth	1946 to 1955	0.1	6.0	16.6	17.2	18.1	17.6	14.1	10.3
American River - Fair Oaks to Mouth	1946 to 1955	1.0	2.3	7.8	21.1	25.0	21.1	15.4	5.4
DELTA UPLANDS									
Old San Joaquin River	1946 to 1955	4.0	11.5	16.2	17.0	19.2	17.0	10.6	4.5
Tom Paine Slough	1946 to 1955	3.5	11.1	13.7	15.5	19.1	18.9	13.4	4.8
San Joaquin River - Vernalis to Stockton	1946 to 1955	5.6	14.1	13.9	15.0	20.0	17.2	10.1	4.1
SAN JOAQUIN VALLEY									
San Joaquin River - Fremont Ford to Vernalis	1946 to 1955	5.9	14.0	14.7	15.5	19.7	17.0	10.4	2.8
Merced River - Snelling to Mouth	1946 to 1955	3.0	8.6	13.1	17.3	22.2	18.6	12.4	4.8
Tuolumne River - Snelling to Mouth	1946 to 1955	5.2	8.9	13.5	16.7	19.1	19.0	12.2	5.4
Stanislaus River - Goodwin Dam to Mouth	1946 to 1955	3.8	10.2	14.4	16.4	18.7	18.2	12.2	6.1

TABLE 206

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

SACRAMENTO RIVER - SACRAMENTO TO REDDING

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	7968	187267	333991	328508	341952	326956	179671	71666	1777979
1947	2743	167131	346326	313389	344334	326100	170785	36296	1707104
1948	53935	16451	251478	271737	365701	351666	217484	65042	1593474
1949	2389	167438	344764	349497	390112	359905	173367	85391	1872863
1950	3072	187703	336767	321253	365503	333194	172902	73766	1794160
1951	6356	254102	303045	380961	409062	373947	177260	69993	1974726
1952	2469	110037	319610	339591	368122	370312	213291	81215	1804647
1953	14102	232604	317154	330664	419918	390251	226040	87431	2018164
1954	2935	96488	402233	407508	448928	409637	242008	81313	2091050
1955	30835	247756	360053	378179	417899	395677	183419	81863	2095681
Average Acre-Feet	12680	166698	331542	342129	387153	363764	195621	73398	1872985
Average c.f.s.	206	2802	5392	5750	6296	5916	3288	1194	3854
Monthly Diversion in per cent of seasonal	0.7	8.9	17.7	18.3	20.7	19.4	10.4	3.9	

(a) See 1946 Water Supervision Report for prior years.

TABLE 207

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

FEATHER RIVER - OROVILLE TO MOUTH

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	47	53967	156398	140210	145235	132948	82010	33985	744800
1947	90	30240	152827	130731	138055	124426	77161	20873	674403
1948	3181	5717	66373	127596	140904	120658	85122	36722	586273
1949	0	57396	146342	141278	137822	126739	59327	47400	716304
1950	164	35170	138368	134088	137034	113954	65197	38076	662051
1951	18	94369	131356	141610	142619	124035	60440	32875	727322
1952	0	29180	131898	142305	149920	140116	91834	42177	727430
1953	9443	68614	143820	145431	162430	139691	83986	38429	791844
1954	0	14833	140856	155666	160603	142046	94979	48159	757142
1955	7754	92377	139687	140112	133952	118221	61151	39741	732995
Average Acre-Feet	2070	48186	134792	139903	144857	128283	76121	37844	712056
Average c.f.s.	34	810	2192	2351	2356	2087	1279	615	1465
Monthly Diversion in per cent of seasonal	0.3	6.8	18.9	19.7	20.3	18.0	10.7	5.3	

(a) See 1946 Water Supervision Report for prior years.

TABLE 208

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

YUBA RIVER - SMARTVILLE TO MOUTH

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	0	7222	15231	15845	17082	16356	13940	13010	98686
1947	0	3820	17316	16339	17364	19152	15577	10517	100085
1948	33	23	12350	13849	17305	17954	16994	14256	92764
1949	0	9062	18933	17288	19416	17890	13338	10920	106847
1950	0	7306	22080	20741	21023	20372	19401	16461	127384
1951	0	13225	20513	19885	19266	17756	12477	7202	110324
1952	0	5959	22828	22537	22231	22622	20056	15580	131813
1953	2	10933	23354	23371	22271	22462	19742	10988	133123
1954	15	0	23630	26960	27574	26512	21088	14784	140563
1955	926	13519	20780	27266	31457	26823	14126	8246	143143
Average Acre-Feet	98	7107	19701	20408	21499	20790	16674	12196	118473
Average c.f.s.	2	119	320	343	350	338	280	198	244
Monthly Diversion in per cent of seasonal	0.1	6.0	16.6	17.2	18.1	17.6	14.1	10.3	

(a) See 1946 Water Supervision Report for prior years.

TABLE 209

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

AMERICAN RIVER - FAIR OAKS TO MOUTH

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	0	10	228	1022	1104	889	766	105	4124
1947	308	422	483	1113	1193	1086	1071	237	5913
1948	92	34	209	866	1737	1420	1030	495	5883
1949	0	58	574	1269	1448	1239	724	200	5512
1950	9	128	546	1096	1110	819	584	307	4599
1951	4	52	450	1194	1297	1404	829	217	5447
1952	0	20	439	824	1073	810	583	204	3953
1953	62	117	227	936	1386	1100	706	328	4862
1954	20	262	671	1597	1927	1239	1092	446	7254
1955	25	120	264	1094	1278	998	642	290	4711
Average Acre-Feet	52	122	409	1101	1355	1101	803	283	5226
Average c.f.s.	1	2	7	19	22	18	13	5	11
Monthly Diversion in per cent of seasonal	1.0	2.3	7.8	21.1	25.9	21.1	15.4	5.4	

(a) See 1946 Water Supervision Report for prior years.

TABLE 210

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

OLD SAN JOAQUIN RIVER (a) - DELTA UPLANDS

Year(b)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	4080	13613	16225	14712	16987	16229	8565	3686	94097
1947	1637	15687	18983	15788	19269	14525	9633	3105	98627
1948	9279	3099	16258	13796	19366	18878	12142	5331	98149
1949	343	15999	19756	18892	20406	16134	10718	6026	108274
1950	6009	15315	18832	18626	22274	19021	12010	4258	116345
1951	202	9746	18249	21022	21130	19784	11329	3706	105168
1952	3	2613	16903	19368	20557	18572	10763	5992	94771
1953	11193	16174	15312	17467	21803	19666	12693	4446	118754
1954	6164	17966	19952	22634	24152	19953	13157	7271	131249
1955	4536	16165	16801	24519	24118	23045	15512	5863	130559
Average Acre-Feet	4345	12638	17727	18682	21006	18581	11652	4968	109599
Average c.f.s.	71	212	288	314	342	302	196	81	226
Monthly Diversion in per cent of seasonal	4.0	11.5	16.2	17.0	19.2	17.0	10.6	4.5	

(a) Excluding diversion by Delta-Mendota and Contra Costa Canals.
(b) See 1946 Water Supervision Report for prior years.

TABLE 211

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

TOM PAINE SLOUGH - DELTA UPLANDS

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	874	2588	2756	3145	3324	3732	2490	798	19707
1947	74	3064	3136	3319	3735	3487	2816	414	20045
1948	629	998	2795	2866	4327	4222	3422	953	20212
1949	155	3534	3114	3570	4324	4017	3226	1362	23302
1950	737	2286	3081	3163	3860	3542	2601	1147	20417
1951	81	2321	3434	3581	4371	4653	3261	886	22588
1952	27	1309	3639	2766	4198	3658	2253	972	18822
1953	2138	2674	1944	3019	3967	3973	2651	972	21338
1954	1394	2711	2588	3627	4515	4155	2477	1371	22838
1955	1290	2139	2625	3785	3925	4723	3320	1217	23024
Average Acre-Feet	740	2362	2911	3284	4055	4016	2852	1009	21229
Average c.f.s.	12	40	47	55	66	65	48	16	44
Monthly Diversion in per cent of seasonal	3.5	11.1	13.7	15.5	19.1	18.9	13.4	4.8	

(a) See 1946 Water Supervision Report for prior years.

TABLE 212

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

SAN JOAQUIN RIVER-DELTA UPLANDS - STOCKTON TO VERNALIS

Year	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	524	13974	10681	9238	15347	13071	6727	2875	77159
1947	5322	13358	14176	11626	15454	14698	7794	2053	84481
1948	6012	4564	9919	8251	13912	13356	7911	2682	66607
1949	1227	13434	11893	13141	14933	12382	7857	3768	78635
1950	5746	13092	12205	11860	17047	13272	7855	3558	84635
1951	279	12239	11485	13346	14860	12649	6840	3181	74879
1952	6	3791	10315	9465	12254	12353	7128	3401	58713
1953	8000	13547	8883	10603	18110	14630	8835	3162	85770
1954	6711	11821	9550	14980	18362	13284	8677	4164	87549
1955	5806	12274	10771	16350	17931	16817	10377	3767	94093
Average Acre-Feet	4436	11209	10988	11886	15821	13651	8000	3261	79252
Average c.f.s.	72	188	179	200	257	222	134	53	1c3
Monthly Diversion in per cent of seasonal	5.6	14.1	13.9	15.0	20.0	17.2	10.1	4.1	

(a) See 1946 Water Supervision Report for prior years.

TABLE 213

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

SAN JOAQUIN RIVER - VERNALIS TO FREMONT FORD BRIDGE

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	6967	21399	24961	23751	32002	28792	17026	5144	160042
1947	11658	31645	28072	27725	34079	27812	17318	3049	181358
1948	12902	18449	21875	15491	28962	27906	1597[illegible]	3425	144785
1949	852	27448	26456	27787	33889	26998	1837[illegible]	5054	166860
1950	15118	26342	25420	26245	33028	28227	15748	4963	175091
1951	4051	30310	24320	27237	35082	30422	16901	4335	172656
1952	1296	7960	28045	25035	31266	28604	18859	5647	147312
1953	19238	29188	24061	30965	41370	34336	21614	5175	205947
1954	13925	27822	28115	32025	37998	32287	21503	6587	200862
1955	16991	24516	25997	32704	36571	32157	18912	5308	193156
Average Acre-Feet	10300	24508	25712	27017	34425	29754	18223	4868	174807
Average c.f.s.	168	412	418	454	560	484	306	79	360
Monthly Diversion in per cent of seasonal	5.9	14.0	14.7	15.5	19.7	17.0	10.4	2.8	

(a) See 1946 Water Supervision Report for prior years.

TABLE 214

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

MERCED RIVER - SNELLING TO MOUTH

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	231	1380	1595	2393	3608	2787	1720	684	14398
1947	228	2863	3128	3372	4342	4095	2518	529	21075
1948	931	328	2321	2634	4899	4162	1953	534	17762
1949	62	2479	3696	5296	5670	3652	2998	1778	25637
1950	676	2086	4050	4793	4809	4336	2673	455	23878
1951	161	1590	3347	4572	4825	4298	2678	739	22210
1952	37	242	2370	3177	3962	4402	2833	1098	18121
1953	2482	3087	3293	3928	6343	4975	3310	1681	29699
1954	1115	2515	3296	4850	6950	4491	3677	2361	29255
1955	985	2814	3379	5296	6086	6044	4374	1356	30334
Average Acre-Feet	691	1998	3048	4031	5150	4324	2873	1122	23237
Average c.f.s.	11	34	50	68	84	70	48	18	48
Monthly Diversion in Per cent of seasonal	3.0	8.6	13.1	17.3	22.2	18.6	12.4	4.8	

(a) See 1946 Water Supervision Report for prior years.

TABLE 215

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

TUOLUMNE RIVER - LA GRANGE DAM TO MOUTH

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	216	565	765	734	940	889	559	254	4922
1947	283	893	1132	1112	1245	1135	1229	439	7468
1948	299	280	822	889	1275	1404	1032	233	6234
1949	39	645	962	1255	1137	1173	806	423	6440
1950	305	588	970	1107	1121	1170	580	259	6100
1951	154	477	586	979	866	890	503	160	4615
1952	7	139	692	945	1077	1073	687	455	5075
1953	1040	1124	1444	1804	2062	2053	1358	468	11353
1954	594	1195	2204	2326	3082	2861	1573	773	14608
1955	1266	1335	1394	2427	2740	2794	1599	879	14434
Average Acre-Feet	420	724	1097	1358	1555	1544	993	434	8125
Average c.f.s.	7	12	18	23	25	25	17	7	17
Monthly Diversion in per cent of seasonal	5.2	8.9	13.5	16.7	19.1	19.0	12.2	5.4	

(a) See 1946 Water Supervision Report for prior years.

TABLE 216

ANNUAL COMPARATIVE MONTHLY DIVERSIONS IN ACRE-FEET 1946 to 1955

STANISLAUS RIVER - GOODWIN DAM TO MOUTH

Year(a)	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Seasonal Diversions
1946	862	3316	3780	4563	5046	4832	2754	1655	26808
1947	1206	4320	4933	4644	5417	5085	3462	1008	30075
1948	1261	1114	4631	4826	6089	6070	4259	1455	29705
1949	41	4747	4661	6152	6531	5648	4251	1940	33971
1950	1313	3240	5385	5493	6266	6254	4055	1382	33388
1951	1163	3733	5043	6101	6076	6333	4240	1970	34659
1952	0	1872	5063	4746	5604	5963	4076	2921	30245
1953	2939	4416	5247	6266	8375	7241	5005	3056	42545
1954	1732	5372	6032	6724	7949	7914	5419	2969	44111
1955	2812	3877	5658	8105	8267	8757	5413	3197	46086
Average Acre-Feet	1333	3601	5043	5762	6562	6410	4293	2155	35159
Average c.f.s.	22	61	82	97	107	104	72	35	72
Monthly Diversion in per cent of seasonal	3.8	10.2	14.4	16.4	18.7	18.2	12.2	6.1	

(a) See 1946 Water Supervision Report for prior years.

TABLE 217

COMPARATIVE SEASONAL DIVERSIONS AND ACREAOES IRRIGATED - SACRAMENTO RIVER - 1946-1955

Year	River Sections							
	Sacramento to Verona	Verona to Knights Ldg.	Knights Ldg. to Wilkins Slu	Wilkina Slu to Colusa	Colusa to Butte City	Butte City to Red Bluff	Red Bluff to Redding	Total Sacramento to Redding
1946 Seasonal diversion in acre-feet	185716	38680	159077	402022	98953	729606	163925	1777979
Average cubic feet per second	382	80	327	827	204	1502	337	3659
Acreage irrigated - general	10722	2024	10923	30861	8719	38934	15373	117556
Acreage irrigated - rice	17187	2485	13995	30828	6445	53195	0	124135
Acre-feet per acre (a)	5.7	8.6	6.4	6.5	6.5	7.9	10.5	7.2
1947 Seasonal diveraion acre-feet	157490	56993	140736	405829	103476	704544	138036	1707104
Average cubic feet per second	324	117	290	835	213	1450	284	3513
Acreage irrigated - general	13658	2982	11070	33853	4361	38149	17517	121590
Acreage irrigated - rice	13687	2688	12549	31584	7393	56080	0	123981
Acre-feet per acre (a)	4.7	10.1	6.0	6.2	8.8	7.5	7.7	6.8
1948 Seasonal diveraion acre-feet	137292	56342	132701	387490	92661	632230	154758	1593474
Average cubic feet per second	283	116	273	797	191	1301	318	3279
Acreage irrigated - general	18117	3947	12685	35760	7860	52944	18421	149734
Acreage irrigated - rice	15145	1568	12125	33503	8299	53477	0	124117
Acre-feet per acre (a)	3.3	10.2	5.3	5.6	5.7	5.9	8.3	5.7
1949 Seasonal diversion acre-feet	182069	69658	189604	396587	96498	758697	179750	1872863
Average cubic feet per second	375	143	390	816	199	1561	370	3854
Acreage irrigated - general	14341	5511	12431	37584	6532	48721	18375	143495
Acreage irrigated - rice	15606	7337	14891	35148	8080	56207	0	137269
Acre-feet per acre (a)	5.1	5.4	6.9	5.5	6.6	7.2	9.6	6.6
1950 Seasonal diversion acre-feet	158567	60217	186229	370134	87246	751503	180264	1794160
Average cubic feet per second	326	124	383	762	180	1546	371	3692
Acreage irrigated - general	15284	4936	12706	39099	11163	50542	19087	152817
Acreage irrigated - rice	10897	5274	13359	26757	9107	43085	0	108479
Acre-feet per acre (a)	4.9	5.9	7.1	5.6	4.3	8.0	9.3	6.7
1951 Seasonal diveraion acre-feet	169060	77772	207624	400587	116568	830331	172784	1974726
Average cubic feet per second	348	160	427	824	240	1709	356	4064
Acreage irrigated - general	19516	4905	15151	41097	10307	51394	19863	162233
Acreage irrigated - rice	16665	3434	15061	32823	14243	58609	0	140835
Acre-feet per acre (a)	3.8	9.3	6.9	5.4	4.7	7.5	8.5	6.4
1952 Seasonal diversion acre-feet	132275	66514	158455	410789	102813	754768	179033	1804647
Average cubic feet per second	272	137	326	845	212	1553	368	3714
Acreage irrigated - general	14608	5186	12326	33350	10308	46686	20467	142931
Acreage irrigated - rice	11550	6761	12622	35766	15314	57040	0	139053
Acre-feet per acre (a)	3.9	5.6	6.4	5.9	4.0	7.3	8.6	6.3
1953 Seasonal diversion acre-feet	161622	66976	187614	433445	135071	861665	171771	2018164
Average cubic feet per second	333	138	386	892	278	1773	353	4153
Acreage irrigated - general	14420	3606	12422	29783	10841	41816	22023	134911
Acreage irrigated - rice	13383	6836	14052	37302	19077	73961	0	164611
Acre-feet per acre (a)	4.8	6.4	7.1	6.5	4.5	7.4	7.7	6.6
1954 Seasonal diversion acre-feet	186288	87880	191601	469457	139848	831264	184712	2091050
Average cubic feet per second	383	181	394	966	288	1710	380	4303
Acreage irrigated - general	13158	5394	14449	34667	10712	38114	23312	139806
Acreage irrigated - rice	16532	9840	14631	40093	19644	84198	0	184938
Acre-feet per acre (a)	5.2	5.8	6.6	6.3	4.6	6.8	7.8	6.3
1955 Seasonal diversion acre-feet	183121	77072	196275	426463	130990	881024	200736	2095681
Average cubic feet per second	377	159	404	878	270	1813	413	4312
Acreage irrigated - general	16756	7471	17797	42317	13350	44000	24022	165713
Acreage irrigated - rice	12336	6077	12969	31783	14155	59035	0	136355
Acre-feet per acre (a)	5.2	5.7	6.4	5.8	4.8	8.6	8.2	6.8
Average 1946-1955								
Seasonal diversion acre-feet	165350	65810	174992	410280	110413	773563	172577	1872985
Average cubic feet per second	340	135	360	844	227	1592	355	3854
Acreage irrigated - general	15058	4596	13196	35837	9416	45130	19846	143079
Acreage irrigated - rice	14299	5230	13625	33559	12175	59489	0	138377
Acre-feet per acre (a)	4.6	6.7	6.5	5.9	5.1	7.4	8.6	6.5
Per cent of total diversion	8.8	3.5	9.4	21.9	5.9	41.3	9.2	

(a) Excluding such diversions for municipal uae as the City of Sacramento and the City of Redding.

TABLE 218

RICE ACREAOE IN CALIFORNIA

A comparison of total rice acreage in California with rice acreage irrigated from the Sacramento and San Joaquin River Systems covered by Sacramento-San Joaquin Water Supervision

Year	Total in State (a)	Irrigated from Sacramento & San Joaquin River Syatems (b)	Ratio in Per Cent (c)	Year	Total in State (a)	Irrigated from Sacramento & San Joaquin River Syatems (b)	Ratio in Per Cent (c)	Year	Total in State (a)	Irrigated from Sacramento & San Joaquin River Systems (b)	Ratio in Per Cent (c)
1924	90000	89000	99	1935	100000	78000	78	1946	255000	212000	83
1925	103000	95000	92	1936	138000	104000	75	1947	250000	215000	86
1926	149000	129000	87	1937	149000	109000	73	1948	238000	199000	84
1927	160000	123000	77	1938	125000	95000	76	1949	298000	236000	79
1928	132000	101000	77	1939	120000	104000	87	1950	240000	187000	78
1929	95000	74000	78	1940	118000	94000	80	1951	319000	240000	75
1930	110000	88000	80	1941	153000	120000	78	1952	335000	245000	73
1931	125000	126000	100	1942	212000	159000	75	1953	429000	297000	69
1932	110000	91000	83	1943	237000	186000	78	1954	485000	327000	67
1933	108000	87000	81	1944	246000	200000	81	1955	340000	242000	71
1934	108000	92000	85	1945	239000	187000	78				

(a) As reported by Federal-State Crop Reporting Service.
(b) Does not include the rice acreage of Merced, Turlock, Modesto, Waterford, Oakdale, and South San Joaquin Irrigation Districts, and Friant-Kern and Madera Canals. Prior to 1947, the rice acreage in the reach from Fremont Ford to Friant Dam of the San Joaquin River was not included.
(c) Ratio of rice acreage in Sacramento and San Joaquin River systems to total rice acreage in State.

TABLE 220

UNIT CONSUMPTIVE USE OF WATER
SACRAMENTO-SAN JOAQUIN DELTA
Acre-Feet per Acre

Classification	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Sudan	.05	.05	.10	.10	.15	.30	.30	.25	.20	.10	.10	.10	1.8
Miscellaneous Pasture	.05	.10	.15	.40	.50	.65	.70	.70	.50	.20	.10	.10	4.15
Alfalfa	.07	.08	.10	.30	.40	.50	.65	.55	.50	.20	.10	.07	3.51
Rice	.05	.05	.10	.15	.90	1.15	1.25	1.20	.35	.09	.10	.10	5.49
Beans	.06	.08	.08	.16	.20	.14	.24	.58	.37	.09	.07	.05	2.12
Corn and Milo	.04	.04	.04	.08	.10	.24	.70	.60	.40	.10	.10	.07	2.51
Grain and Hay	.04	.04	.07	.40	.60	.30	.14	.23	.21	.14	.07	.05	2.29
Peas	.10	.10	.20	.30	.10	.05	.14	.13	.11	.09	.10	.10	1.52
Safflower and Sunflower	.05	.05	.10	.30	.40	.50	.20	.13	.11	.09	.10	.10	2.13
Sugar Beets	.06	.08	.08	.13	.32	.51	.61	.53	.20	.13	.10	.07	2.82
Asparagus	.05	.05	.05	.05	.08	.14	.40	.68	.55	.42	.12	.10	2.69
Celery	.04	.04	.04	.08	.10	.10	.10	.20	.25	.30	.20	.05	1.50
Onions	.04	.04	.08	.13	.27	.49	.43	.20	.16	.13	.10	.07	2.14
Potatoes	.06	.08	.08	.16	.15	.38	.52	.30	.15	.09	.07	.05	2.09
Tomatoes	.05	.05	.10	.10	.10	.25	.35	.60	.45	.35	.10	.10	2.60
Seed and Miscellaneous Truck	.06	.08	.08	.10	.25	.50	.50	.50	.35	.10	.10	.07	2.69
Fruit and Nuts	.04	.04	.04	.18	.32	.50	.57	.40	.23	.07	.07	.05	2.51
Grapes	.04	.09	.04	.09	.20	.35	.50	.35	.22	.05	.07	.05	2.65
Native Vegetation - Lush	.12	.14	.21	.31	.40	.59	.68	.57	.39	.29	.20	.12	4.02
Medium	.12	.16	.22	.28	.31	.40	.45	.38	.28	.24	.19	.13	3.15
Dry	.13	.17	.23	.24	.22	.21	.22	.20	.17	.18	.18	.14	2.29
Fallow and Bare	.04	.04	.04	.08	.10	.13	.14	.13	.11	.09	.07	.05	1.02
Idle Crop Land	.06	.08	.08	.16	.20	.26	.28	.24	.16	.13	.10	.07	1.82
Duck Ponds	.05	.05	.10	.10	.10	.05	.14	.13	.60	.60	.30	.10	2.32
Urban	.06	.08	.08	.16	.20	.20	.21	.20	.16	.13	.07	.05	1.60
Tule and Swamp	.13	.18	.34	.51	.70	.79	.87	.77	.64	.49	.27	.13	5.82
Levee and Berm	.10	.10	.15	.20	.25	.30	.35	.35	.30	.20	.10	.10	2.50
Water Surface	.06	.10	.20	.33	.50	.58	.65	.57	.44	.27	.12	.06	3.88

TABLE 221

CONSUMPTIVE USE OF WATER IN THE DELTA SERVICE AREA - 1955

Quantities in Acre-Feet

Classification	Acreage	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Sudan	991	50	50	99	99	149	297	297	248	198	99	99	99	1784
Miscellaneous Pasture	62147	3107	6215	9322	24859	31074	40396	43503	43503	31074	12429	6215	6215	257912
Alfalfa	62276	3737	4982	6228	18683	24910	31138	40479	34252	31138	12455	6228	4359	218589
Rice	5765	288	288	576	865	5188	6630	7206	6918	2018	519	576	576	31648
Beans	3911	235	313	313	626	782	548	939	2268	1447	352	274	196	8293
Corn and Milo	82158	3286	3286	3286	6573	8216	19718	57511	49295	32863	8216	8216	5751	206217
Grain and Hay	95708	3828	3828	6700	38283	57425	28712	13399	22013	20099	13399	6700	4785	219171
Peas	97	10	10	19	29	10	5	14	13	11	9	10	10	150
Safflower and Sunflower	5623	281	281	562	1687	2249	2812	1125	731	619	506	562	562	11977
Sugar Beets	34519	2071	2762	2762	4487	11046	17605	21057	18295	6904	4487	3452	2416	97344
Asparagus	82830	4142	4142	4142	4142	6626	11596	33132	56324	45556	34789	9940	8283	222814
Celery	1432	57	57	57	114	143	143	143	286	358	430	286	72	2146
Onions	1217	49	49	97	158	329	596	523	243	195	158	122	85	2604
Potatoes	8539	512	683	683	1366	1281	3245	4440	2562	1281	769	598	427	17847
Tomatoes	40810	2040	2040	4081	4081	4081	10202	14284	24486	18364	14284	4081	4081	106105
Seed and Misc. Truck (a)	6423	385	514	514	642	1606	3212	3212	3212	2248	642	642	450	17279
Fruit and Nuts	22898	916	916	916	4121	7327	11448	13051	9158	5266	1603	1603	1145	57470
Grapes	766	31	69	31	69	153	268	383	268	169	38	54	38	1571
Native Vegetation - Lush	1104	132	155	232	342	442	651	751	629	431	320	221	132	4438
Med.	9369	1124	1499	2061	2623	2904	3748	4216	3560	2623	2249	1780	1218	29605
Dry	38043	4944	6467	8750	9130	8369	7989	8369	7609	6467	6848	5326	3718	87118
Fallow and Bare Land	2005	80	80	80	160	200	261	281	261	221	180	140	100	2044
Idle Crop Land	3213	193	257	257	514	643	835	900	771	514	418	321	225	5848
Duck Ponds	1649	82	82	165	165	165	82	231	214	989	989	495	165	3824
Total Agricultural	573491	31582	39025	51933	123818	175318	202137	269446	287119	211053	116188	59463	46716	1613798
Urban	2008	1205	1607	1607	3214	4017	4017	4218	4017	3214	2611	1406	1004	32137
Tule and Swamp (b)	11975	1557	2156	4072	6107	8382	9460	10418	9221	7664	5868	3233	1557	69295
Levee and Berm	19245	1924	1924	2887	3849	4811	5774	6736	6736	5774	3849	1924	1924	48112
Water Surface (c)	49309	2959	4931	9862	16272	24654	28599	32051	28106	21696	13313	5917	2959	191319
Total Nonagricultural	100815	7645	10618	18429	29442	41884	47850	53423	48080	38348	25641	12480	7444	341263
Grand Total	674306	39227	49643	70362	153260	217202	249987	322869	335199	249401	141829	71943	54160	1955061

(a) Includes [illegible] acres of nonsegregated crops.
(b) Includes islands in small channels.
(c) Includes interior and exterior water surface.

TABLE 222

MAXIMUM RECORDED SALINITY AT PRESENTLY INDICATIVE BAY AND DELTA STATIONS

(Releases of stored water from Shasta Lake commenced in 1944.)

YEAR	1931	1934	1938	1939	1944	1947	1950	1951	1952	1953	1954	1955
Sacramento-San Joaquin Runoff in per cent of normal (a)	33	47	184	48	61	59	83	131	164	104	92	62
Station (b)	Maximum recorded salinity in parts of chloride per million											
						San Pablo Bay						
Point Orient	18700	18400	17000	19200	17300	18800	17600	17700	16700	16900	19320	20000
Point Pinole						16800	15400	15500	14200	13300	15600	19000
Point Davis	18100	18000	*14600	18400	15200	16500	14400	14600	12700	14400	15800	12900
Grand View	18700				15300	18000	13800	15900	12100	14000	15500	16700
Crockett						17900	15200	15100	13200	14680	16000	16600
						Carquinez Strait						
Benicia					13900	15100	12500	12200	10400	12020	14000	15100
Martinez	16900	16400	11600	16400		13400	11500	10100	8900	10500	11800	11900
						Suisun Bay						
West Suisun						13500	10300	10800	7900	9940	12800	12600
Port Chicago						12400	10100	8700	6900	8940	10900	12500
Innisfail Ferry	14000	12600	3300	13600	7900	8200	4700	4400	4200	6430	6900	5780
O & A Ferry	13900	12000	2560	11800	7300	6100	4800	4400	2800	3640	5670	6400
Pittsburg						5000	2200	2400	1200	1830	4580	7800
						Sacramento River Delta						
Collinsville	12600	10800	860	10400	4700	4500	2800	1750	783	2200	4520	3880
Emmaton (c)										(d)	1380	1080
Threemile Slough Bridge	8600	6600		5900	1610	1250	150	600	175	155	818	635
Rio Vista Bridge	7400	5200		4050	550	270	200	70	175	33	126	158
Isleton Bridge	6350	3100		2500	50	50	50	60	125	29	28	23
						San Joaquin River Delta						
Antioch	12400	9600	510	9200	4000	4700	1330	970	354	1440	3430	3320
Millers Harbor						3000	1390	(d)	(d)	360	1970	2360
Jersey Island										490	1480	1130
Threemile Slough										49	960	428
Oulton Point										65	395	376
San Andreas Landing										61	123	98
Opposite Central Landing	4250	*1250	100	1380	200	200	80	80	250	44	75	36
Dutch Slough	5100	2800	110	2250	690	840	230	170	88	114	688	454
Webb Ferry										160	652	331
East Contra Costa I. D.		730		320	140	190	200	190	152	167	200	196
Clifton Court Ferry	1300	400		190		160	170	120	112	122	160	146
Mossdale Bridge	120	250	120	160	130	180	170	190	122	194	209	224
Vernalis						*180	160	220	121	205	198	231

* Estimated.
a Normal taken as 50-year (1905-1955) mean annual unimpaired flow (Oct.-Sept., Incl.) at foothill stations of major tributaries.
b For location see Plate 3.
c Previously listed as Opposite Toland Landing.
d Record incomplete.

TABLE 223

DESCRIPTION OF ACTIVE SALINITY OBSERVATION STATIONS - 1955

(Refer to previous Water Supervision Reports for description of stations which have been discontinued.)

Station	Miles from Golden Gate (a)	Time Interval (b) Hours	Time Interval (b) Mins.	Location
				SAN FRANCISCO, SAN PABLO, AND SUISUN BAYS
Point Orient	12.3	2	20	North end of San Francisco Bay, east shore, one-half mile south of Point San Pablo Wharf of Standard Oil Company.
Point Pinole	19.0	2	50	South shore of San Pablo Bay, at Point Pinole on wharf of Atlas Powder Company.
Point Davis	25.2	3	15	East end San Pablo Bay, south shore, Oleum Wharf of Union Oil Company.
Grand View	25.2	3	15	Northwest shore of San Pablo Bay at mouth of Petaluma Creek.
Crockett	27.7	3	30	West end of Carquinez Strait, south shore, 0.2 mile east of Carquinez Bridge on wharf of C. and H. Sugar Refining Corporation.
Benicia	32.5	3	50	East end of Carquinez Strait, north shore, 1.1 mile west of Southern Pacific Company railroad bridge at Benicia Arsenal.
Martinez	32.7	3	50	East end of Carquinez Strait, south shore, 1.0 mile west of Southern Pacific Company railroad bridge at Municipal Ferry Slip. (Bulls Head Point.)
West Suisun	37.0	4	10	West end of Suisun Bay, north shore, 2.5 miles northeast of Southern Pacific railroad bridge at service pier of U. S. Maritime Commission, Reserve Fleet mooring area.
Innisfail Ferry	47.3	4	50	Montezuma Slough, about one mile east of junction with Cutoff Slough near north end of Grizzly Island.
Port Chicago	41.0	4	20	South shore of Suisun Bay at U. S. Naval ammunition loading wharf below Port Chicago.
O & A Ferry	46.5	4	40	Upper end Suisun Bay between Mallard Station and Chipps Island at Sacramento Northern Railroad Ferry Crossing.
Pittsburg	48.0	5	00	East end of Suisun Bay, south shore, at Pittsburg Yacht Harbor.
				SACRAMENTO RIVER DELTA
Collinsville	50.8	5	25	Sacramento River, north bank at junction with San Joaquin River.
Emmaton (Opp. Toland Landing)	57.6	5	45	Sacramento River, south bank, 5.9 miles downstream from Rio Vista.
Threemile Slough Bridge	60.0	5	55	At junction of Slough and Sacramento River.
Rio Vista Bridge	63.5	6	05	At highway bridge near northerly limits of Rio Vista.
Isleton Bridge	68.7	6	30	Sacramento River, one mile upstream from Isleton.
				SAN JOAQUIN RIVER DELTA
Antioch	54.9	5	55	San Joaquin River at City Water Works pumping plant.
Millers Harbor	58.2	6	10	South shore San Joaquin River at Antioch Bridge.
Jersey Island	61.4	6	20	San Joaquin River, left bank, one mile below mouth of False River.
Threemile Slough	64.2	6	30	Threemile Slough, west bank, at junction of slough with the San Joaquin River.
Oulton Point	67.2	6	40	San Joaquin River, right bank, three miles upstream from junction of Threemile Slough.
San Andreas Landing	70.3	6	55	San Joaquin River, right bank, one mile below the mouth of the Mokelumne River.
Opposite Central Landing	72.0	7	00	Mokelumne River on Andrus Island directly opposite Central Landing on Bouldin Island.
Dutch Slough	73.0	7	05	At Bethel Island Bridge.
Webb Ferry	68.0	6	40	False River at junction with Fishermen's Cut.
East Contra Costa I. D.	86.7	8	20	Indian Slough at East Contra Costa Irrigation District Pumping Plant.
Clifton Court Ferry	94.2	9	10	Old River just below junction with Grant Line Canal.
Mossdale Bridge	108.5	10	50	San Joaquin River at U. S. 50 Highway crossing about three miles southwest of Lathrop.
Vernalis (Durham Ferry Bridge)	127.0	11	00	San Joaquin River at Durham Ferry Bridge above tidal influence.

(a) Mileage measured to station along main channel. For stations off the main channel, the mileage shown is the same distance along the main channel to a point whereon the time of the occurrence of the tidal phase is the same as that of the observation station.
(b) Time interval between high tide at Golden Gate and time for taking samples at station.

TABLE 224

SALINITY OBSERVATIONS, SACRAMENTO-SAN JOAQUIN DELTA AND UPPER BAYS

Samples taken by local observers approximately one and one-half hours after high high tide

Salinity expressed in parts of chloride per million parts of water

Station	January - 1955							
	2	6	10	14	18	22	26	30
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	14500	13900	12000	13600	14100	11900	12000	13300
Point Pinole								
Point Davis	9700	9660	8900	7880	8400	5480		8600
Grand View	(b)7940	7720		6980	6460	5320	5000	(b)4500
Crockett	(d)7740	7820	7620	6720	8100	5200	(b)5760	7320
Benicia	6320	5840	4880	4900	6300	2440	2800	5840
Martinez	4320	2640	(a)1740	(a)2820	3620	2460	2120	6040
West Suisun					(a)2740		308	3240
Innisfail Ferry	1720		(a)1440	(a)1620	1620	1460	1380	672
Port Chicago	3780	824	2190	1220	2980	(d)308	248	2920
O & A Ferry	328	(*)60	80	40	40	28	44	36
Pittsburg	92	(b)44		44	(b)52			48
				Sacramento River Delta				
Collinsville	24	48	(a)24	60	16	24	24	44
Emmaton (**)	20			20	24		24	24
Threemile Slough Bridge	20	20	20	16	24	20		20
Rio Vista Bridge	16	16	16	16	20	16	20	20
Isleton Bridge	16	8	12	16	16	16	16	20
				San Joaquin River Delta				
Antioch	60	40	44	48	48	56	60	52
Millers Harbor	(*)48	52	48	56	60	64	(a)48	64
Jersey Island								
Threemile Slough	44	24	(a)24	32	40	44	(a)40	44
Oulton Point		44	(a)48		44	52	(a)40	24
San Andreas Landing	40	44	48	28	24	44	36	44
Opp. Central Landing	20	24	(a)20	36	24	12	(a)16	24
Dutch Slough	64	76	68	76	84	(a)108	104	96
Webb Ferry		(a)44	52	(c)52	(b)56	56	(d)52	48
Holland Tract								
East Contra Costa Irrigation Dist.	196	(b)188	(a)180	164	172	(a)144	(a)152	160
Clifton Court Ferry								
Mossdale Bridge	64	(a)56	(a)72	76	(a)40	(a)48	(a)88	92
Vernalis (g)	(c)64		(b)64	76	(b)48	(a)44	(e)88	(f)84

Station	February - 1955							
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	14400	14700		13200	13800	15000	14500	
Point Pinole								
Point Davis	7760	8620	9180	8280	8900	10700	10700	
Grand View		5860	5880	5960	4980	7100	7680	
Crockett	7840	8260	7520	(a)5580	7400	(b)9280	9840	
Benicia	6400	5160	(a)4100	4520	6680	6840	6740	
Martinez	4160	3380	2500	7760	4740	5140	6260	
West Suisun	4740	3520	1840	(*)2600			3920	
Innisfail Ferry	1060	1100	960	(a)760	1040	860	1060	
Port Chicago	2940	2520	1720	2760	1760	2980	3620	
O & A Ferry	178	69	59	184	599	356	266	
Pittsburg	73			359	149	62	(b)293	
				Sacramento River Delta				
Collinsville	52	37	40	27	86	(b)35	42	
Emmaton (**)	29		(a)24	20	22		(a)23	
Threemile Slough Bridge	24	(*)35	22	21	26	21	14	
Rio Vista Bridge	24	16	20	20	17	16	11	
Isleton Bridge	22	16	13	18	14	8	9	
				San Joaquin River Delta				
Antioch	48	47	53	53	54	59	65	
Millers Harbor	56	(a)57	54	49	53	49	(e)52	
Jersey Island								
Threemile Slough	40	32	25	29	40	31		
Oulton Point	48	45	41	40	55	42	43	
San Andreas Landing	48	43	39	41	32	45	43	
Opposite Cantral Landing	36	(a)14	18	19	32	(a)16	14	
Dutch Slough	76	74	79	77	72	70	68	
Webb Ferry	48	50	52	45	49	(de)50	(d)45	
East Contra Costa Irrigation Dist.	(b)156	(ab)163	162	168	173	(a)178	(b)175	
Clifton Court Ferry	103		121	91	(a)102	(a)92	(a)82	
Mossdale Bridge	88	(a)106	77	82	(a)93	(a)77	98	
Vernalis (g)	(e)84	(f)97	(f)114	(b)93		84	(e)78	

(*) Presumed
(**) Formerly known as "Opposite Toland Landing."
(a) Taken on Low High Tide.
(b) Taken on following day.
(c) Taken two days later.
(d) Taken over one hour off scheduled time.
(e) Taken on preceding day.
(f) Taken two days earlier.
(g) Station located above tidal action.

TABLE 224 (cont'd.

SALINITY OBSERVATIONS, SACRAMENTO-SAN JOAQUIN DELTA AND UPPER BAYS

Samples taken by local observers approximately one and one-half hours after ... High high tide
Salinity expressed in parts of chloride per million parts of water

Station	March - 1955							
	2	6	10	14	18	22	26	30
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	12800	13800	14600		12700	14600		14700
Point Pinole								
Point Davis		9700	10200	6960	(d)10700	(b)11400		
Grand View	8120	8160	(b)8080	8560	(b)8820	9000	9400	9700
Crockett	(*)7060	7690	9180	(a)4380		10500	10800	10300
Benicia	5100	5160	5380	6280	7040	7020	8600	8440
Martinez	5260	4300	(a)3360	3600	5920	(a)6000	(a)7280	7140
West Suisun		2460	3140	2720	3580	4600		6880
Innisfail Ferry	1480	1900	4[illegible]	(a)1340	1330	(d)1410	1560	1690
Port Chicago	2480	2140	3220	1920	2560	4720	5720	5540
O & A Ferry	130		367	109	333	312	990	1680
Pittsburg	76	(*)86	(a)82		60			
				Sacramento River Delta				
Collinsville	33	33	(a)34	32	26	(a)60	305	704
Emmaton(**)	19		22	20	19		20	
Threemile Slough Bridge	15	17	21	22	18	(a)17	17	19
Rio Vista Bridge	16	16	13	16	12	13	13	16
Isleton Bridge	16	11	14	5	10	10	9	12
				San Joaquin River Delta				
Antioch	60	53	(a)61	58	45	(a)53	(a)123	292
Millers Harbor	50	52	52	49	48	(a)44		(d)44
Jersey Island								
Threemile Slough	41	46	(a)42	28	33	(a)26		(d)20
Oulton Point	39	42	41	36	37	(a)27	31	32
San Andreas Landing	44	42	34	35	30	(a)16	23	22
Opposite Central Landing	28	17	12	16	11	(a)13	18	11
Dutch Slough	72	74	75	67	68	(a)59	52	52
Webb Ferry	44	48	(a)43	(d)50	(de)41	30	(d)38	36
East Contra Costa Irrigation Dist.	179	176	174	181	159	134	(b)57	80
Clifton Court Ferry	96		106	(d)68		116		95
Mossdale Bridge	85	(a)96	103	74	93	143	188	224
Vernalis (g)	(e)92	(c)87	(c)86	(b)91	115			(a)191

Station	April - 1955							
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	15200	15100	15100	15400	13900	15700	15900	14500
Point Pinole								
Point Davis			11600	11300	11900	12900	(*)11200	9430
Grand View	10000	11400	11300	11800	12500	(d)9960	(e)12200	12400
Crockett	(b)8840	(a)10200	10800	10100		(b)13300	10300	(b)10000
Benicia	(*)7340	8160	9940	8580	9770	(d)6710	(a)8310	8340
Martinez	5720	(a)5340	(a)4830	7930	(a)7710	(a)6770	(a)1910	(a)5780
West Suisun		5140		6390	7380	7220	6270	
Innisfail Ferry	1860	(a)1840	1830	1800	(a)1800	2150	2350	(a)1950
Port Chicago	3740	5020	5920	4500	4830	6080	5030	(b)2510
O & A Ferry	860	940	1700	1320	1420	2310	487	
Pittsburg	340	(a)250						
				Sacramento River Delta				
Collinsville	292	(a)184	554	768	(a)548	(a)853	469	(a)19
Emmaton(**)	16	(a)20	(a)36	35	(a)24	(a)23	11	(a)12
Threemile Slough Bridge	16	16	19	19	19	23	10	(a)13
Rio Vista Bridge	12	12	16	11	9	9	12	(a)10
Isleton Bridge	8	8	8	13	8	6	8	(b)4
				San Joaquin River Delta				
Antioch	152	(a)132	336	301	(a)292	(a)342	324	(a)54
Millers Harbor	52	(ab)40	40	58	(a)59	(f)49	47	(a)24
Jersey Island						(a)51		(a)17
Threemile Slough		(a)24	(a)24	20	(a)25		17	
Oulton Point	24	(a)24	23	(d)24	(a)20	(a)20	17	(a)17
San Andreas Landing	16	(a)16	(a)20	16	(a)12	(a)13	17	(a)13
Opposite Central Landing	16	(a)8	13	16	(a)10	(a)8	8	(a)7
Dutch Slough	44	40	34	36	(a)34	38	32	(a)28
Webb Ferry	32	(a)28	(d)24	(d)28	(d)21	(d)25	22	(a)18
East Contra Costa Irrigation Dist.	6	0	(b)66	(b)62	55	52	65	(a)78
Clifton Court Ferry		76			47	43	51	
Mossdale Bridge	(a)220	192	185	161	204	126	91	(a)134
Vernalis (g)	(e)192	(c)146	(c)169	(b)172		(b)143	102	(e)124

(*) Presumed.
(**) Formerly known as "Opposite Toland Landing."
(a) Taken on Low High Tide.
(b) Taken on following day.
(c) Taken two days later.
(d) Taken over one hour off scheduled time.
(e) Taken on preceding day.
(f) Taken two days earlier.
(g) Station located above tidal action.

TABLE 224 - contd.

SALINITY OBSERVATIONS, SACRAMENTO-SAN JOAQUIN DELTA AND UPPER BAYS

Samples taken by local observers approximately one and one-half hours after high high tide
Salinity expressed in parts of chloride per million parts of water

Station	May - 1955							
	2	6	10	14	18	22	26	30
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	(a)13000		14100			15400		(b)15000
Point Pinola								
Point Davis		11400	3750	0350		11400	9980	11100
Grand View	12200	12000	11700	11400	10600	10600	9730	10500
Crockett		10100	(d)7720	5190	(b)9280	(ab)9060	7330	(b)7150
Benicia	7140	8040	4600	3660	6720	9830	6650	(b)7050
Martinez	(a)3020	(a)2690	(a)2360	(a)2360	3220	(a)4060	(e)6060	(a)2540
West Suisun	2980	5500	2380	2320		6510	3920	
Innisfail Ferry	(a)1830	1100	733	(a)1260	(af)1320	(a)573	(a)1140	(a)983
Port Chicago	487	(*)4170	2160	(*)1060	3850	6350	3590	2420
O & A Ferry	96	242	49	26	126	1100	331	(b)137
Pittsburg		(ab)31	(a)25		(a)98		199	(ab)196
				Sacramento River Delta				
Collinsville	(a)23	(a)16	19	(a)13		(a)185	58	(a)27
Emmaton	(a)9	(a)9	8			(a)11	13	(a)10
Threemile Slough Bridge	9	9	9	(b)7	8	17	(a)11	(b)8
Rio Vista Bridge	9	12	9	(b)10	9	12	11	(b)9
Isleton Bridge	7	(*)12	7	(b)7	7	9	7	(b)5
				San Joaquin River Delta				
Antioch	(a)44	(a)29	(a)21	(a)23	(a)18	(a)82	89	(a)37
Millers Harbor	25	(a)18	16		(a)15			
Jersey Island			13	(a)16				
Threemile Slough	(a)12		10		(a)10	(a)11	12	(a)12
Oulton Point	(a)15		13	(a)12	(f)11	12	16	(a)16
San Andreas Landing	(a)13	(a)10	13	(a)14	(a)11	(a)14	13	(a)13
Opposite Central Landing	(a)5	(a)7	8		(a)8	10	11	(a)12
Dutch Slough	(a)27	21	24	(a)24	(a)30	18	19	(a)20
Webb Ferry	(a)21	(a)20	15		(a)14	(a)15	(d)16	(a)15
East Contra Costa Irrigation Dist.	117	64	b)75	(a)92	86	39	35	(a)40
Clifton Court Ferry	46		(a)46		38			
Mossdale Bridge	134	122	117	(a)166	186	215	49	(a)52
Vernalis (g)		128	(b)126	168	(e)191	(f)208	(b)85	

Station	June - 1955							
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	(*)15100	15300	(e)15600	14600		15900		(e)16300
Point Pinole								
Point Davis	10600	11300	(b)9160	10800	10600	12800	(b)11700	
Grand View	11000	10800	10900	11100	12200	11700	12800	(e)13200
Crockett	9380	(a)9690	9870	9900	12100	11900	11600	(e)12300
Benicia	7000	9100	7530	8440	9340	9640	8220	10100
Martinez	(a)2790	(a)3570	(a)4620	(a)3440	(a)4480	(a)4960	7210	(a)6350
West Suisun	4100	6300	4860	5940	8670	7900	7010	7790
Innisfail Ferry	(b)1000		1150	1230	(a)1270	1610	1790	2190
Port Chicago	3950	3970	3870	4140	6230	(*b)5880		7650
O & A Ferry	164	960	463	298	934	1180	1370	1830
Pittsburg		(a)161	199	(a)158		(a)884	(a)740	(ab)787
				Sacramento River Delta				
Collinsville	(a)31	(a)132	191		(a)205		(a)592	(a)690
Emmaton	13	17	14	(a)12		51	(a)32	189
Threemile Slough Bridge	(a)8	9	14	(b)12	12	16		35
Rio Vista Bridge	10	11	8	(b)18	8	19	(b)13	14
Isleton Bridge	6	14	8	(b)8	13	12	(b)16	21
				San Joaquin River Delta				
Antioch	(a)34	(a)71	100	(a)54	(a)89	433	(a)349	(a)324
Millers Harbor	(a)16	19	25	(a)21		42	(b)63	364
Jersey Island				(a)18	(a)19	79		
Threemile Slough	(a)11	(a)15	13	(a)16	(a)18	(a)23		26
Oulton Point	(a)10	(a)15	17	(a)17			(a)18	(a)21
San Andreas Landing	(a)17	(a)15	18	(a)13	(a)16	(a)18	(a)15	(a)18
Opposite Central Landing	(a)6	18	10	(a)24	(a)10	13	(ac)18	(a)15
Dutch Slough	(a)21	18	18	(a)22	20	27	(a)24	(a)37
Webb Ferry	(a)14	(a)15	19	15	(d)17	14	(a)36	(e)36
East Contra Costa Irrigation Dist.	(a)38	(a)33	30	(a)32	29	28	(a)29	
Clifton Court Ferry		28						
Mossdale	36	92	26	(a)53	83	130	(a)153	171
Vernalis (g)	(b)73	(b)52	33	58	(e)77	(e)135	(c)159	

(*) Presumed.
(a) Taken on Low High Tide.
(b) Taken on following day.
(c) Taken two days later.
(d) Taken over one hour off scheduled time.
(e) Taken on preceding day.
(f) Taken two days earlier.
(g) Station located above tidal action.

TABLE 224 - contd.

SALINITY OBSERVATIONS, SACRAMENTO-SAN JOAQUIN DELTA AND UPPER BAYS

Samples taken by local observers approximately one and one-half hours after high high tide
Salinity expressed in parts of chloride per million parts of water

Station	July - 1955							
	2	6	10	14	18	22	26	30
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	16800		15600	15600	15900	16000	15800	(e)17800
Point Pinole				(a)14300	(a)13700			(a)16100
Point Davis								
Grand View		13000	14500	13100	13700	13800	13100	
Crockett			12000	12600	(a)11900	13000	(eb)12400	(b)14400
Benicia	11200	10100	9780	9960	12100	(f)10800	10700	12600
Martinez	6500	(a)5940	8240	(a)6660	(a)6680	(a)8260	(a)9060	(a)8460
West Suisun	8790	7760	8570	10400	10200		7170	
Innisfail Ferry	2110							
Port Chicago	5920	7660	6680	(b)8580	8810	8120	8730	9660
O & A Ferry	2950	2030	2470	(b)3860	3960	4100	4330	5340
Pittsburg	(ab)1030	(a)995	(a)1380	(a)1380	(ab)3270	(a)3060	(b)3410	
				Sacramento River Delta				
Collinsville	(a)1110	1640	1530		(a)1970	2640	(a)2190	(a)2550
Emmaton	80	255	75	(a)89	311	548	(a)172	1015
Threemile Slough Bridge	32	49	50	(b)68	170	215	195	351
Rio Vista Bridge	16	16	15	(b)19	32	24	(b)15	25
Isleton Bridge	13	23	13	(b)15	13	13	(b)14	13
				San Joaquin River Delta				
Antioch	(a)442	(a)596	853	(a)643	(a)1220	2010	(a)1270	(a)1410
Millers Harbor	195	278	220	(a)497	(aa)498	600		1841
Jersey Island	264	(a)76						
Threemile Slough	(a)24	(a)89	45	(d)75	(a)139		(a)167	395
Oulton Point	(a)24		(a)53	(a)39	(a)53	159	(a)111	(d)110
San Andreas Landing	(a)20	(a)18	(e)21	(aa)24	(a)32	48	(a)21	(a)46
Opposite Central Landing	(a)16		(a)17	(a)20	(a)17	22	(a)16	(a)16
Dutch Slough	(a)44	57	(a)61	(a)74	(a)114	182	(a)161	(a)209
Webb Ferry	39	37	(a)57	(a)58	172	(e)174	(d)181	(a)183
East Contra Costa Irrigation Dist.	26	28	(a)32	(a)33	33	40	(ab)51	(a)54
Clifton Court Ferry		(d)24			30	35		
Mossdale Bridge	182	154	(a)196	(a)185	191	(a)176	(a)210	184
Vernalis (g)		(c)178	(c)167	(b)193	(b)137	189	185	(e)183

Station	August - 1955							
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	18400	19000	18500	(a)18500		19700	18700	19000
Point Pinole	(a)16300		(d)19000					
Point Davis								
Grand View	15200	15500	(a)16400		16600	16700	16500	16300
Crockett	(a)13700	14700	16300	(a)15700	(a)16600	15600	15000	(a)14800
Benicia	12700	12100	13400	13900	15100	12600	13500	13300
Martinez	(a)8450	(a)9100	10500	(a)10800	(a)9810	(a)10700	11000	(e)9100
West Suisun	10000	9700	12600	12400	11500	11700	11800	
Innisfail Ferry								
Port Chicago	7580	9360	10600	12500	10400	9650	10200	10200
O & A Ferry	5150	5110	6350	5120	5590	6400	4920	5290
Pittsburg		(a)3720	(ab)2600	(ab)3100	(a)3000	(a)7800		(a)2640
				Sacramento River Delta				
Collinsville	(a)3260	3190	(a)3250	(a)3520	(a)3880	(a)3340		(a)2800
Emmaton	685	594	(a)462	(a)438	(a)806	540	450	1080
Threemile Slough Bridge	356	373	477	635	577	513	(c)426	338
Rio Vista Bridge	28	17	40	158	32	14	(b)16	19
Isleton Bridge	12	12	15	14		(a)12	(b)14	(a)14
				San Joaquin River Delta				
Antioch	(a)1690	2270	(a)1890	(a)2100	2670	3320	(a)1400	(a)1790
Millers Harbor	(a)1080	(a)1140	1370	2360	(a)1230	1410	(a)880	1670
Jersey Island	(b)1130	870			(a)512	735		
Threemile Slough	(a)272	428	(a)154	(a)302	(a)342	280	(a)304	306
Oulton Point	(a)139	171	(a)126	(a)162	376	(a)152	(a)177	(a)102
San Andreas Landing	(aa)46	98	(a)44	(a)66	(a)89	68	(a)17	(e)80
Opposite Central Landing	(a)19	20	(a)15			(a)15	(a)17	(a)15
Dutch Slough	265	336	(a)337	(a)392	454	(a)405	(a)346	(a)342
Webb Ferry	(a)166	162	(a)323	(a)298	331	(a)330	(e)283	(ac)280
East Contra Costa Irrigation Dist.	62	72	(a)93	(e)108	113	(a)139	(b)147	(a)157
Clifton Court Ferry			(a)71		80	(d)68		112
Mossdale Bridge	186	176	(a)196	(a)187	169	(a)178	(a)180	166
Vernalis (g)	186	(e)231	(a)155		(e)174	(b)158	180	151

(a) Presumed.
(a) Taken on Low High Tide.
(b) Taken on following day.
(c) Taken two days later.
(d) Taken over one hour off scheduled time.
(e) Taken on preceding day.
(f) Taken two days earlier.
(g) Station located above tidal action.

TABLE 224 - contd.

SALINITY OBSERVATIONS, SACRAMENTO-SAN JOAQUIN DELTA AND UPPER BAYS

Samples taken by local observers approximately one and one-half hours after high high tide
Salinity expressed in parts of chloride per million parts of water

Station	2	6	10	14	18	22	26	30
	September - 1955							
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	(a)17700		20000	18400	18600	18200		18000
Point Pinole				(e)16500			(e)16100	15700
Point Devis								
Grand View	16100	16600	16400	16500	16000	16500	15700	15900
Crockett	(d)14000	16200	14700	(a)15000	15000	13300	13200	13800
Benicia	12800	12200	(*)12900	13300	11200	12300	11500	10800
Martinez	(a)10100	(a)9990	(a)9650	(e)9440	9400	(a)8870	(a)8450	9700
West Suisun	10600		10600	11500	10100	10400	9850	
Innisfail Ferry							(a)5780	(a)5400
Port Chicago	10400	10300	9600	10000	8550	8550	7900	7550
O & A Ferry	5120	5130	4940	3630	4220	3540	(b)1700	2550
Pittsburg	(a)3420	(e)3660			(a)2360		(a)1000	1270
				Secramento River Delta				
Collinsville	(a)2920	(a)3040	(a)2410		1790	(e)1600	(a)1280	1190
Emmaton	(e)375	(a)390		(a)294	206	(e)93		141
Threemile Slough Bridge		340	(b)380	196	89	71	(b)40	50
Rio Vista Bridge	22	15	(b)19	16	16	18	(b)19	20
Isleton Bridge	12	18	(b)13	14	17	20	(b)17	18
				San Joequin River Delta				
Antioch	2450	2350		(e)1870		1210	(a)576	720
Millers Harbor	1260			740	737	358	(a)214	325
Jersey Island				(a)308				
Threemile Slough		249	(a)134	(a)183	(ab)81	(a)88	(a)59	50
Oulton Point	248	(a)112	(a)61	(a)59	(e)50	(e)44	(e)44	50
San Andreas Landing	(a)97	(a)71	(a)18	(a)49	(a)43	(a)36	(a)33	30
Opposite Central Landing	(a)21	(a)17	(a)15	(e)17	(a)18	(a)18	(a)16	18
Dutch Slough	349	(a)309	(a)278	(a)236	(e)206	(a)165	(a)148	118
Webb Ferry	(a)198	(a)199	(e)219	(eb)210	(ac)104	(e)100	(e)75	(e)65
East Contra Costa Irrigation Dist.	157	(a)148	(b)149	(e)142	(a)140	(a)142	134	(e)154
Clifton Court Ferry				(a)105		(a)96	(a)87	
Mossdale Bridge	166	(e)160	(a)194	158	(a)175	(e)171	(a)178	(a)189
Vernalis (g)			(e)157	(e)151	(e)169	(b)163	(b)155	
	October - 1955							
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	18300		17800	18200		17100	16900	18000
Point Pinole			(a)16200				14800	
Point Devis								
Grand View	15300	16300	16400	15200	15100	15500	15400	14700
Crockett	(b)15300	13900	(b)13900	13400	14000	12400	13900	14100
Benicia	11800	11300	11500	12300	11700	10300		12400
Martinez	10000	(a)7940	(e)9250	9900	(a)9000	(a)8250	9200	10800
West Suisun	9800	8500	8750		9300	8760		11200
Innisfail Ferry				5080	5040	(a)5200	(ab)5140	(e)5080
Port Chicago	7630	8800	9130	9050	8200	6350	8180	9750
O & A Ferry	(a)3160	3100	2480	3420	3890	2400	3000	4040
Pittsburg	3440	1170	(eb)1180	(b)2470	1850		(b)735	(b)1370
				Secramento River Delta				
Collinsville	1820	(a)960		2280	(a)1210	(a)1220		2065
Emmaton	(e)62	(e)63	(a)69	68	(a)64		52	
Threemile Slough Bridge	56		(b)50	53	41	33	23	27
Rio Vista Bridge	21	21	(b)15	17	13	14	12	12
Isleton Bridge	15	17	(b)12	13	8	11	10	12
				San Joequin River Delta				
Antioch	970	1100	(a)780	1090	990	690	662	905
Millers Harbor	160	(a)160	(a)159	127	147	128	80	64
Jersey Island				152				
Threemile Slough		(a)38	(a)53	82	(a)57		31	(a)34
Oulton Point	55	(a)34	(a)38	47	(a)32	(e)25		24
San Andreas Landing	29	(a)29	(a)23	22	(*a)22	(*a)20	21	14
Opposite Central Landing	17	(a)14	(e)11	14	(a)11	(e)10	13	12
Dutch Slough	107	(a)91	(a)82	76	77	(a)61	52	51
Webb Ferry	(d)79	(a)76	(a)47	(e)45	(a)43	(a)43	33	31
East Contra Coste Irrigation Dist.	(a)141	(e)132	(b)130	(e)112	(a)117	(b)131	173	(e)80
Clifton Court Ferry				(a)67	(e)73			(a)122
Mossdale Bridge	(a)187	(a)187	(e)181	(e)168	(a)143	(e)133	149	(a)158
Varnelis (g)	(c)188	(e)176	(b)169	184	140	(e)131	(e)191	

(*) Presumed.
(e) Taken on Low High Tide.
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(f) Taken two days earlier.
(g) Station located above tidal action.

TABLE 224 (contd.

SALINITY OBSERVATION, SACRAMENTO-SAN JOAQUIN DELTA AND UPPER BAYS

Samples taken by local observers approximately one and one-half hours after high high tide
Salinity expressed in parts of chloride per million parts of water

Station	November - 1955							
	2	6	10	14	18	22	26	30
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	17900	16900	18200	18000		16500	16700	(d)15900
Point Pinole	15300		15000					
Point Davis								
Grand View	14700	14900	15000	14500	15000	14600	14500	14000
Crockett	14200	11400	(b)14000	13500	12700	(a)9350	11700	13000
Benicia	10800	9200	11900	10900	8700	8720	10100	9370
Martinez	11900	(a)6900	11400	11700	10500	8360		7900
West Suisun			8900			(a)5080	6560	
Innisfail Ferry	5020	4860	4700	4650	5020	4800	(ab)4930	3510
Port Chicago	9150	7280	8330	8220	6260	6150	6570	7500
O & A Ferry	3290	2620	2560	3630	2440	1900	1590	2270
Pittsburg	3190	(ab)1080	1210	1830	1190			430
				Sacramento River Delta				
Collinsville	(a)1150	1350	1390	1880	915	396		992
Emmaton	(a)37			158	113	28		(a)26
Threemile Slough Bridge	37	26	24	32	27	15	11	
Rio Vista Bridge	15	11	12	12	12	13	9	10
Isleton Bridge	9	10	13	10	9	9	8	13
				San Joaquin River Delta				
Antioch	1220	615	840	1270	784	312	144	388
Millers Harbor	96	88	61		(a)77	(a)55	32	(d)33
Jersey Island								
Threemile Slough		(a)26	28	33	(a)25	(d)23	18	(a)17
Oulton Point	(a)25	(a)23	32	32	(a)20		19	(a)22
San Andreas Landing	22	(a)22	16	31	(a)22	23	17	22
Opposite Central Landing	(a)11	(a)11	11	12	(a)10	15	8	(a)7
Dutch Slough	(a)49	(a)43	42	43	(a)44	40	41	(a)39
Webb Ferry	30	(d)29	(e)29	32	(a)28	(b)27		(e)22
East Contra Costa Irrigation Dist.	(a)86	(a)84	(b)84	(a)91	(a)104	120	132	130
Clifton Court Ferry				(a)146				
Mossdale Bridge	(a)173	(a)122	(a)161	(a)206	(a)163	(e)134	120	(a)125
Vernalis (g)		(c)129	(c)202		136		121	(e)120

Station	December - 1955							
				San Francisco, San Pablo, and Suisun Bays				
Point Orient	15800		16900	15100	16100	13400	2510	4630
Point Pinole		13900		13200				
Point Davis								
Grand View	14200	13700	12700	12800	11400	3230	2150	1110
Crockett	12600	12800	9760	(b)9750	10100	1990	82	24
Benicia	9300	10700	8700	6650	6100	4500	50	29
Martinez	(a)6300	9550	7630	6400	8460	(e)2730	23	30
West Suisun	8300			4000	4600	2260	50	150
Innisfail Ferry	3620	3400		1910		(a)2920	283	295
Port Chicago	7130	7600	2190	4430	6450	1570	26	21
O & A Ferry	2050	1760	310	476	321	(*)30	6	14
Pittsburg	874		560	(b)111		58		
				Sacramento River Delta				
Collinsville	(a)308	607		54	(a)37	21		8
Emmaton			11			4	2	(a)3
Threemile Slough Bridge	13	14	7	7	10	3	3	2
Rio Vista Bridge	10	(a)12	6	8	11		6	7
Isleton Bridge	10	10	4	11	12	5	4	3
				San Joaquin River Delta				
Antioch	454	300	104	73	102	66		19
Millers Harbor	38	31	31	29	30	(a)33	40	(b)29
Jersey Island								
Threemile Slough		20	19			14		
Oulton Point	(a)20	26	20	(a)20		17		
San Andreas Landing	20	21	20	24	(a)24	6		
Opposite Central Landing	(e)10	10	8	(a)9	(a)15	7	2	(a)4
Dutch Slough	(a)40	40	44	(a)53	36	53	91	(a)30
Webb Ferry	(a)20	(d)23	23	22	(d)26	(d)27		
East Contra Costa Irrigation Dist.	134	(b)146	151	(ab)173	(a)173	162	(b)42	(a)23
Clifton Court Ferry								
Mossdale Bridge	(a)120	113	(a)82	(a)79	(a)86	(d)69	(d)4	(a)10
Vernalis (g)	125	105		(a)77	(c)87			

(a) Presumed.
(a) Taken on Low High Tide.
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(e) Taken on preceding day.
(f) Taken two days earlier.
(g) Station located above tidal action.

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10⁶	pH	Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
									Parts per Million												
SACRAMENTO RIVER AT DELTA T36N, R5W. Sec. 15																					
1/19	1700		512	36	13.0	94	115	7.5	[illegible]	6.3	6.4	0.7	0	63		6.0			[illegible]		23
2/10	0930		618	38	12.2	91	116	7.9	5.7	8.0	5.7	0.6	0	64		4.4			0.06		21
3/10	1100		640	48	11.7	100	115	7.7	6.1	7.5	5.7	0.7	0	64		3.9			0.04		21
4/14	1330		781	49	11.8	101	102	7.8	5.7	7.0	4.1	0.5	0	59		3.2			0.10		17
5/16	1300		1240	54	10.9	101	87.2	7.5	5.7	6.0	3.2	0.4	0	53	2.5	2.0	0.1	0.1	0.04	64	15
6/22	1330		355	64	10.1	105	127	7.6	7.2	7.8	6.9	0.7	0	72		5.5			0.12		23
7/13	0900		245	67	9.5	102	141	7.6	8.9	7.5	6.8	0.9	0	77		7.5			0.28		26
9/13	1100		158	62	9.6	97	163	8.0	11	8.4	15	1.5	0	84	50	8.9	0.1	0.1	0.25	118	37
10/14	0930		194	56	9.9	94	159	7.5	9.7	7.4	12	1.3	0	82		8.2			0.28		32
11/16	1600		226	38	13.1	98	153	7.6	8.8	7.3	11	1.3	0	77		10			.18		31
12/16	1330		651	44	11.6	97	116	7.6	7.6	6.6	6.4	0.8	0	63		5.0			0.17		23
SACRAMENTO RIVER AT KESWICK T32N, R5W. Sec. 28																					
1/19	1400		512	48	10.03	86	110	7.0	11	3.5	6.0	1.0	0	57		3.0			0.02		23
2/10	1130		4350	46	10.1	84	133	7.2	9.7	6.2	7.9	1.8	0	73		2.8			0.00		25
3/8	1500		3050	50	12.0	106	118	7.3	8.8	5.6	7.0	1.9	0	67		2.9			0.0		24
4/14	1230		7100	50	11.4	100	127	7.3	11	4.8	7.3	1.5	0	71		3.5			0.06		24
5/12	0800		6370	50	11.9	105	127	7.6	11	4.8	7.3	1.5	0	3.0	4.0	3.0	0.2	0.1	0.06	94	24
6/20	1600		9120	50	10.0	88	124	7.4	11	4.8	6.9	1.3	0	70		2.8			0.04		24
7/18	1700		11300	60	9.4	94	125	7.3	11	5.0	7.3	1.4	0	71		3.0			0.07		24
9/13	0900		7680	52	9.2	83	119	7.2	12	3.7	5.6	1.3	0	66	3.0	1.8	0.1	0.1	0.09	85	21
10/13	1600		6370	55	8.9	84	119	7.2	10	6.6	6.0	1.4	0	68		1.3			0.11		20
11/16	1100		4350	56	9.2	87	121	7.2	11	4.8	6.8	1.6	0	67		3.5			0.01		23
12/12	1600		3120	54	9.8	81	138	7.0	10	6.1	8.0	1.6	0	71		3.0			0.17		25
SACRAMENTO RIVER AT REDDING T31N, R4W. Sec. 6																					
1/19	1100		6700	46	10.16	85	112	7.2	11	4.0	6.8	1.4	0	64		3.0			0.00		24
2/9	1400		4300	50	12.2	108	123	7.4	11	5.3	8.2	1.6	0	72		3.2			0.00		26
3/8	1400		3050	51	12.6	112	120	7.6	8.1	6.3	7.4	1.6	0	66		2.8			0.00		25
4/13	1430		6100	50	11.6	101	128	7.7	11	4.5	7.1	1.4	0	71		3.2			0.06		24
5/11	1600		5400	54	12.2	113	135	7.6	11	4.6	7.4	1.4	0	66	8.5	3.2	0.2	0.1	0.06	95	25
6/20	1000		8438	52	12.4	112	125	7.6	10	5.1	7.1	1.3	0	69		2.8			0.02		24
7/14	2000		10200	52	10.1	91	121	7.4	10	5.1	7.1	1.4	0	70		2.8			0.05		24
9/12	1130		6600	52	10.9	93	117	7.4	13	3.0	6.1	1.3	0	66	3.0	2.0	0.4	0.1	0.05	85	20
10/10	1400		5370	54	10.2	95	120	7.3	11	5.7	8.3	1.2	0	67		1.1			0.08		21
11/16	1300			56	10.2	97	131	7.4	12	4.9	7.6	1.7	0	72		3.8			0.09		24
12/12	1100		2580	54	10.0	93	132	7.2	11	5.2	7.9	1.6	0	69		3.5			0.08		25
SACRAMENTO RIVER AT HAMILTON CITY T22N, R1W. Sec. 17																					
1/11	1000		11000	43	11.3	91	130	7.4	11	4.9	6.8	1.0	0	66		4.8			0.00		23
2/7	1800		7740	48	10.8	93	158	7.4	15	6.7	8.3	1.2	0	84		5.0			0.06		22
3/7	1100		5690	53	10.3	94	161	7.4	14	6.8	9.5	1.5	0	84		5.0			0.10		24
4/4	1000		5250	52	10.4	94	144	7.6	12	6.1	8.7	1.5	0	78		3.2			0.06		25
5/12	0900		7290	65	8.3	87	134	7.4	12	5.4	6.9	1.3	0	70	7.3	4.2	0.3	0.0	0.04	96	22
6/16	0820		6802	69	8.8	96	133	7.5	13	3.9	7.8	1.5	0	72		3.2			0.08		25
7/14	0800		9100	58	9.9	96	129	7.4	11	5.2	7.7	1.3	0	73		3.2			0.10		25
8/18	0840		8060	58	9.7	95	133	7.4	12	5.1	7.4	1.6	0	74		3.2			0.00		23
9/15	1500		6980	59	9.5	93	127	7.4	11	5.3	6.0	1.3	0	70	5.2	2.0	0.2	0.2	0.01	92	20
10/13	0850		5460	59	9.5	93	132	7.4	11	6.0	7.1	1.4	0	71		1.9			0.07		22
11/17	0850		6070	49	10.5	92	144	7.0	12	5.6	9.0	1.6	0	79		3.4			0.06		26
12/14	1600		6320	50	11.1	98	157	6.8	14	6.1	8.4	1.4	0	75		6.5			0.03		23
SACRAMENTO RIVER AT KNIGHTS LANDING T11N, R2E. Sec. 14																					
1/12	1030		12500	43	12.0	97	201	7.4	17	[illegible]	23	1.2	0	92		18			0.01		38
2/9	1038		7320	44	10.6	86	314	8.0	20	13	27	1.4	0	112		20			0.07		36
3/8	1500		6670	51	10.2	94	293	7.8	20	11	24	1.6	0	113		18			0.00		35
4/5	1412		6270	56	10.1	98	267	8.2	12	15	23	1.8	0	114		15			0.13		35
5/16	0930		7330	64	8.3	97	401	7.8	21	14	45	2.7	0	155	49	27	0.9	0.3	0.19	250	46
6/20	1000		5030	73	7.6	97	520	7.8	26	16	63	1.7	0	188		36			0.40		51
7/18	0910		7100	71	8.3	99	330	7.2	18	12	34	1.6	0	144		18			0.21		43
8/22	0930		6680	73	7.7	96	[illegible]0	7.6	23	19	50	1.7	0	203		26			0.26		44
9/19	0910		8130	65			512	7.4	30	13	51	2.6	0	201	52	32	1.2	0.5	0.25	309	43
10/17	1000		5760	65	8.7	92	354	7.3	21	12	33	1.9	0	140		19			0.16		40
11/24	1120		11000	48	9.9	95	314	7.8	16	11	34	2.3	0	98		21			0.24		46
12/12	1050		12800	48	11.8	102	317	6.[illegible]	17	11	33	1.8	0	92		2[illegible]			[illegible]17		45
SACRAMENTO RIVER AT SACRAMENTO T9N, R4E. Sec. 35																					
1/17	1440		22700	44	10.9	89	105	7.3	15	7.2	15	1.1	0	80		12			0.00		32
2/15	0900		12600	46	10.6	92	217	7.4	17	[illegible]7	14	1.2	0	97		[illegible]5			0.07		28
3/18	1330		13600	55	10.4	99	176	7.5	14	7.1	9.9	2.3	0	93		6.0			0.18		24
4/19	0830		8600	54	9.7	90	131	7.4	[illegible]7.7	[illegible].2	[illegible].0	1.2	0	72		3.8			0.03		22
5/16	0730		20200	70	8.2	92	167	7.6	13	6.0	12	1.0	0	73	13	6.2	0.5	0.2	0.06	110	31
6/20	0800		10200	69	8.3	97	212	7.6	14	[illegible].0	16	1.2	0	93		13			0.08		33
7/15	1300		8800	72	8.4	96	221	7.3	14	8.0	18	1.8	0	92		12			0.29		36
8/22	0750		8370	70	8.5	95	267	7.5	17	11	22	1.4	0	121		16			0.00		35
9/19	1015		11000	64	7.7	79	269	7.5	18	12	21	1.8	0	126	17	16	0.3	0.2	0.19	174	32
10/14	1230		8660	62	8.2	83	169	7.3	13	7.3	10	1.5	0	88		5.1			0.11		25
11/18	1225			47	10.3	85	178	7.3	13	7.5	12	1.7	0	93		7.5			0.05		26
12/22	1400		74100	50	10.0	89	[illegible]3.4	7.1	[illegible].0	2.4	2.8	1.5	0	2[illegible]		1.7			[illegible].14		18

* Explanation of abbreviations:

G. H. - Gage height
ppm - Parts per million
% sat. - Per cent saturation
Kx10⁶ - Conductance micromhos at 25.0 C
Ca - Calcium
Mg - Magnesium
Na - Sodium
K - Potassium
CO_3 - Carbonate
HCO_3 - Bicarbonate
SO_4 - Sulfate
Cl - Cloride
NO_3 - Nitrate
F - Fluoride
B - Boron

TABLE 25.

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Dissolved Oxygen Temp °F	ppm	%sat	Kx10⁶	pH	Parts per Million Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
COTTONWOOD CREEK AT COTTONWOOD T32N, R3W, Sec. 7																					
1/10	1500		490	45	11.7	[illegible]	263	7.5	26	16	11	.9	0	122		13			0.02		18
2/7	0900		505	42	11.0	87	278	7.5	26	12	12	0.8	0	138		9.5			0.03		18
3/3	1140		415	50	11.0	96	263	7.5	27	12	11	1.9	2	127		11			0.00		17
4/1	0915		365	53	10.9	92	232	7.3	24	11	9.5	0.8	0	126		9.4			0.05		16
5/11	1315		784	61	7.5	84	150	7.2	13	7.4	7.0	2.7	0	77	9.1	2.3	1.0	0.2	0.16	105	19
6/15	1230		250	70	9.0	100	203	7.6	21	9.4	9.3	1.7	0	112		6.2			0.07		19
7/13	1320		93	78	9.1	110	214	7.2	17	12	8.7	1.2	0	117		6.5			0.16		17
8/17	1310		73	73	9.4	108	172	7.2	14	8.8	8.3	1.4	0	69		4.0			0.08		20
9/14	1315		90	66	8.3	89	165	7.3	14	7.4	8.3	1.8	0	92	4.0	3.5	0.5	0.3	0.02	112	21
10/12	1345		75	66	10.0	106	181	7.1	14	8.1	8.6	1.4	0	98		4.0			0.00		20
12/14	1130		60	48	11.3	96	266	6.8	25	11	11	1.0	0	117		15			0.00		19
STONY CREEK AT HAMILTON CITY T22N, R2W, Sec. 36																					
1/11	1100		108	45	13.1	1.8	3.1	.8	3	15	17	0.7	4	160		26			0.24		19
2/7	1230		89	50			404	.4	41	16	20	0.6	7	160		9			0.39		20
3/7	1130		19	50	10.9	98	394	8.0	42	16	18	0.9	6	176		26			0.00		19
4/4	1045		0	52	11.0	100	390	8.1	39	18	18	0.7	0	193		21			0.10		19
5/12	0945		1	7	7.8	76	376	7.5	39	14	18	0.9	0	174	21	25	0.6	0.1	0.15	219	20
COLUSA TROUGH NEAR COLUSA																					
1/12	1330			43	10.8	87	1220	8.2	49	39	160	2.6	0	281		107			0.21		55
2/9	1150			50	10.3	91	1670	8.4	70	59	224	1.2	12	328		164			0.37		54
3/8	1730		116	57	11.3	108	1420	8.4	51	55	185	2.2	10	319		126			0.15		53
4/5	1600			56	10.0	95	432	8.2	21	18	42	2.3	0	158		24			0.16		41
5/13	0930			68	7.3	90	453	7.7	23	16	51	2.6	0	174	57	26	1.1	0.2	0.20	280	47
6/17	1040			75	7.5	88	493	7.6	26	16	56	1.5	0	194		28			0.02		45
7/15	1000			76	7.0	83	469	7.4	23	20	51	1.7	0	209		22			0.22		44
8/19	0850		965	71	7.5	84	453	7.4	26	19	48	1.6	0	205		23			0.25		42
9/19	1050		603	66	8.1	87	525	7.4	27	21	51	2.2	0	207	57	29	1.2	0.5	0.20	319	42
10/14	0930		323	65	8.0	85	535	7.4	26	18	51	2.5	0	183		26			0.11		44
11/18	1020			48	10.8	93	609	7.3	29	21	74	3.2	0	210		35			0.23		50
12/13	1415		249	50	9.2	90	1020	6.8	44	37	131	2.8	0	288		77			0.35		52
SACRAMENTO SLOUGH AT KNIGHTS LANDING T11N, R3E, Sec. 20																					
1/12	1115		302	41	11.6	91	366	7.8	27	19	24	1.9	0	198		18			0.18		26
2/9	1000			48	10.0	86	477	7.8	34	25	32	1.7	0	236		32			0.04		27
3/8	1430			57	8.5	91	479	8.0	35	25	32	2.1	0	239		36			0.00		27
4/5	1340		320	60	7.9	99	351	8.2	22	20	21	1.8	0	177		22			0.06		25
5/16	1000		0	68	7.3	90	414	8.0	27	20	29	2.1	0	192	14	35	0.9	0.2	0.07	251	29
6/20	0920		611	74	6.6	76	435	7.6	34	17	32	1.3	0	199		38			0.03		31
7/18	0850		396	76	6.5	77	621	7.5	36	30	50	1.3	0	259		68			0.11		33
8/22	0900		548	76	6.7	79	539	7.8	35	27	44	1.6	0	272		44			0.02		30
9/19	0830		823	67	7.5	81	422	7.4	30	21	31	2.3	0	222	7.0	24	0.5	0.3	0.08	257	29
10/17	0915		204	66	7.8	83	512	7.3	36	25	36	1.8	0	253		40			0.11		29
11/24	1145			49	9.5	83	419	7.2	28	21	30	3.0	0	202		32			0.17		29
12/12	1020		0	48	9.7	84	290	7.0	19	14	19	2.6	0	141		18			0.07		27
PIT RIVER NEAR CANBY T41N, R9E, Sec. 10																					
3/2	1020		93	36	10.5	76	252	7.4	19	6.7	25	5.0	0	135		7.0			0.00		40
4/1	1020		197	47	9.3	79	201	7.8	11	9.0	18	3.5	0	106		6.4			0.12		35
5/11	0800		224	59			177	7.5	15	5.0	15	3.7	0	97	7.1	3.0	1.3	0.4	0.13	133	34
6/15	0800		40	62	7.8	80	311	7.6	26	8.5	29	5.7	0	182		3.7			0.16		37
7/13	0830		73	70	7.1	79	303	7.6	21	11	30	4.9	0	173		4.0			0.19		39
8/17	0800		9	59	7.2	71	302	7.8	25	10	25	5.3	0	183		4.5			0.10		33
9/14	0850		64	60	7.9	79	275	7.4	22	10	21	5.1	0	160	5.0	4.0	0.6	0.5	0.10	179	31
10/12	0920		40	51	9.8	88	315	7.9	22	9.4	32	6.1	0	177		6.5			.18		41
11/16	0930		40	34	11.6	82	280	7.1	19	6.7	31	5.8	0	145		8.4			0.16		45
PIT RIVER NEAR MONTGOMERY CREEK T35N, R1W, Sec. 32																					
2/10	1400		4000	44	11.7	95	148	8.0	9.7	7.3	10	1.9	0	90		3.5			0.0		28
5/12	1400		780	60	10.0	100	138	7.6	12	4.9	9.2	2.2	0	80	3.5	3.0	0.4	0.2	0.06	103	27
6/21	1730		4080	66	9.0	96	153	7.6	10	7.1	11	2.3	0	91		4.0			0.00		30
7/14	0800		1640	64	7.2	75	153	7.8	12	6.3	11	2.2	0	92		4.0			0.11		29
11/21	1130		4480	48	11.2	96	141	7.6	12	4.9	9.6	2.1	0	79		4.5			0.09		28
MC CLOUD RIVER ABOVE SHASTA LAKE T30N, R3W, Sec. 28																					
5/16	1500		1790	55	10.8	102	92.7	7.5	11	3.6	4.0	0.9	0	57	2.3	1.0	0.2	0.0	0.02	77	18
6/22	0930		1130	52	10.7	96	97.4	7.6	10	3.2	4.3	1.2	0	56		1.0			0.01		21
7/13	1400		1000	56	9.2	87	97.4	8.0	9.3	3.8	5.1	1.4	0	61		1.2			0.02		21
9/13	1350		16	54	10.5	98	96.5	7.7	11	3.1	4.6	1.5	0	57	1.6	0.9	0.1	0.1	0.00	83	21
11/21	1400		1570	46	11.5	96	7.0	7.4	9.6	3.7	4.4	1.2	0	50		1.5			0.00		21
BURNEY CREEK NEAR BURNEY T35N, R3E, Sec. 18																					
3/2	1530			40	10.6	82	94.4	6.4	11	4.0	4.1	1.3	0	59		4.5			0.00		16
4/1	1015			42	10.4	83	65.4	7.2	3.5	4.5	3.2	0.7	0	42		0.0			0.03		20
5/11	1000			50	10.5	93	49.5	7.2	5.1	1.8	2.4	0.8	0	32	0.5	0.8	0.1	0.2	0.02	46	20
6/15	1000			57	9.6	93	91.1	7.3	10	3.4	3.0	1.2	0	58		0.4			0.00		17
7/13	1040		20	58	9.2	90	102	7.4	10	4.4	4.0	1.3	0	66		0.5			0.04		17
9/17	1015		25	53	9.4	87	108	7.4	11	5.5	4.6	0.8	0	71		0.8			0.00		16
9/14	1040		50	55	9.0	85	108	7.2	11	4.6	4.3	1.0	0	70	0.0	0.0	0.2	0.0	0.00	84	16
10/12	1120		25	45	10.0	93	111	7.3	10	5.6	4.5	1.2	0	71		0.0			0.03		17
11/16	1230		35	36	11.8	86	107	7.6	10	5.2	4.2	1.1	0	70		0.0			0.00		16

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Dissolved Oxygen Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10⁶	pH	Parts per Million Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
MILL CREEK NEAR LOS MOLINOS T25N, R2W, Sec. 5																					
1/11	0830			37	12.8	95	171	7.2	13	4.0	14	1.9	0	62		16			0.37		37
2/7	1015		200	42	12.6	100	186	7.4	13	5.7	16	2.2	0	66		17			0.46		37
3/7	0900		141	44	11.7	95	186	7.2	13	5.0	16	2.6	0	64		18			0.25		38
4/4	0830		150	46	11.8	99	145	7.6	7.7	5.1	12	2.1	0	54		13			0.39		38
5/11	1430		500	62	9.7	99	101	7.6	7.6	2.4	7.3	1.6	0	36	10	6.5	0.2	0.1	0.19	81	34
6/15	1430			68	9.8	106	130	7.7	12	1.1	11	3.1	0	38		9.0			0.06		38
7/13	1450		15	83	9.8	124	214	7.4	15	7.9	15	3.1	0	81		16			0.52		31
8/17	1445			79	9.7	118	235	7.4	16	9.3	17	3.2	0	92		18			0.49		31
9/14	1430			69	7.7	85	252	7.0	18	9.3	16	3.8	0	98	16	19	0.5	0.0	0.46	171	28
10/12	1500		10	64	10.0	104	202	7.3	12	6.1	17	2.8	0	65		20			0.65		39
11/16	1630		40	43	11.6	93	229	6.8	14	5.5	21	3.0	0	66		24			0.73		43
12/14	1400		150	42	11.4	91	191	6.8	12	5.1	17	2.6	0	60		20			0.58		41
DEER CREEK NEAR VINA T24N, R2W. Sec. 14																					
1/11	0900			37	12.1	89	145	7.4	12	5.4	8.6	1.3	0	82		4.2			0.03		26
2/7	1045			43	11.0	88	146	7.8	12	6.5	9.0	1.6	0	83		4.0			0.09		25
3/2	0930		166	45	11.3	94	144	7.4	12	6.8	8.9	1.5	0	84		4.5			0.10		24
4/4	0930			46	11.5	98	121	7.4	7.7	7.0	7.0	1.3	0	76		2.5			0.07		24
5/11	1510			68	9.1	99	88	7.8	8.5	3.8	4.8	1.3	0	52	1.1	1.2	0.3	0.2	0.01	74	21
6/15	1500			85	10.0	130	185	8.1	13	9.9	10	2.1	3.0	107		4.0			0.13		22
7/13	1515			94	11.3	113	256	7.8	17	16	14	2.7	6	152		5.0			0.22		22
8/17	1500		1	84	11.6	100	332	7.6	27	20	16	2.9	0	215		6.0			0.18		19
9/14	1515		7	71	11.0	124	326	7.4	34	14	15	3.1	0	203	4.8	6.5	0.1	0.1	0.12	224	18
10/12	1540		289	74	9.9	115	183	7.5	14	7.8	13	3.4	0	105		4.8			0.19		28
11/16	1700			43	11.7	94	170	6.8	12	7.0	12	1.8	0	95		5.5			0.14		30
12/14	1420		467	47	12.0	102	144	6.8	11	6.2	9.2	1.6	0	84		4.0			0.09		27
BIG CHICO CREEK NEAR CHICO																					
1/11	1200			41	11.9	90	166	7.6	13	6.1	10	0.7	0	81		8.8			0.13		27
2/7	1230			44	10.2	83	132	7.6	12	5.1	7.9	1.0	0	71		5.0			0.06		25
3/7	1245			45	11.6	96	130	7.6	11	6.2	7.6	0.8	0	71		5.0			0.00		23
4/4	1130			46	11.0	92	142	8.0	9.4	7.9	8.8	0.9	0	82		5.8			0.09		25
5/12	1115			61	10.0	100	130	7.9	11	6.0	6.9	0.9	0	71	3.6	6.0	0.1	0.0	0.02	104	22
6/16	0950			65	8.7	92	185	7.6	15	7.3	12	1.3	0	98		8.3			0.10		27
7/14	0920		30	72	9.1	103	201	7.6	16	8.0	14	1.3	0	108		10			0.24		29
8/18	0950		28	67	9.3	100	206	7.8	16	9.8	15	1.4	0	115		12			0.24		28
9/15	0940		37	62	9.6	98	210	7.3	17	8.2	14	1.6	0	110	4.6	10	0.2	0.2	0.00	152	28
10/13	1010		33	58	10.0	98	209	7.4	16	8.8	14	1.3	0	107		11			0.16		28
11/17	1010		43	42	11.3	90	223	7.0	16	8.3	17	1.3	0	103		14			0.21		33
12/15	1015		59	47	11.6	99	164	6.8	13	6.9	11	0.9	0	84		8.0			0.10		28
BUTTE CREEK NEAR CHICO T22N, R2E, Sec. 36																					
1/11	1330			39	13.0	99	102	7.4	11	4.5	3.3	0.6	0	61		1.5			0.10		13
2/7	1515			44	12.3	100	105	7.8	12	4.0	3.8	0.7	0	63		0.8			0.00		15
3/7	1400			46	11.5	96	103	7.3	11	4.5	3.8	0.8	0	61		1.0			0.00		15
4/4	1415			46	11.4	95	80.2	7.4	5.2	5.2	3.4	0.8	0	52		0.8			0.01		17
5/12	1150			58	10.4	101	67.6	7.4	6.8	3.4	2.5	0.7	0	41	1.3	0.5	0.3	0.0	0.06	56	15
6/16	1040			63	9.9	102	93.6	7.5	9.8	3.4	3.3	0.8	0	56		0.4			0.00		15
7/14	1000		162	65	7.6	80	101	7.4	16	1.2	3.7	0.0	0	65		0.5			0.08		15
8/18	1025		84	62	9.5	97	108	7.4	11	5.0	4.1	1.0	0	68		0.8			0.04		15
9/15	1030		164	58	10.1	98	108	7.4	12	4.2	3.3	0.9	0	66	1.2	0.0	0.1	0.1	0.00	78	13
10/13	1100		75	54	10.9	101	118	7.0	11	5.8	4.2	1.1	0	70		0.0			0.07		15
11/17	1100		120	41	12.1	95	127	7.0	13	5.4	4.8	0.9	0	74		0.3			0.09		16
12/15	1100		204	44	12.0	98	107	6.8	11	4.8	3.7	0.8	0	64		0.5			0.00		14
INDIAN CREEK NEAR CRESCENT MILLS T26N, R9E, Sec. 25																					
5/10	1050		1140	51	9.4	84	81.3	7.2	9.3	2.1	3.8	1.1	0	48	2.2	0.5	0.4	0.2	0.03	65	20
6/14	1215		208	67	7.5	81	131	7.2	16	3.7	5.8	1.6	0	79		0.0			0.00		18
7/12	1400		19	73	7.7	89	239	6.8	26	8.5	13	2.1	0	140		4.2			0.06		22
8/16	1245		6	67	7.0	76	291	6.8	33	8.4	17	1.8	0	174		6.8			0.20		24
9/13	1215		5	62	7.5	76	363	6.8	36	12	21	1.6	0	201	10	12	0.3	0.0	0.14	221	24
10/11	1045		17	50	9.5	84	236	6.8	25	8.9	12	1.4	0	133		4.9			0.10		21
11/15	1245		23	40	10.0	77	189	6.8	19	6.7	9.8	1.3	0	104		2.6			0.09		22
FEATHER RIVER NEAR OROVILLE T19N, R4E Sec. 5																					
1/11	1430		1980	41	13.4	104	100	7.4	11	3.4	3.8	0.7	0	56		2.0			0.15		16
2/8	0940		1300	40	12.1	93	114	6.8	12	4.4	4.9	0.9	0	64		1.8			0.00		18
3/7	1515		1400	43	12.3	99	112	7.8	13	4.0	5.3	1.1	0	62		2.0			0.00		19
4/4	1530		3910	46	11.6	97	87.9	7.6	6.1	5.0	3.8	0.7	0	51		0.6			0.16		18
5/12	1300		9450	55	10.4	97	59.1	7.4	6.8	2.2	2.3	0.5	0	36	1.7	0.5	0.5	0.0	0.12	47	16
6/16	1250		2860	64	10.1	105	101	7.4	9.7	3.9	4.2	0.9	0	58		1.3			0.00		18
7/14	1120		2030	69	9.6	106	112	7.4	12	4.1	4.6	1.2	0	67		1.0			0.01		17
8/18	1140		1840	68	9.2	100	115	7.6	11	6.2	5.0	1.4	0	69		1.8			0.15		17
9/15	1140		1840	66	9.4	100	129	7.4	14	4.4	5.1	1.4	0	74	5.2	0.7	0.5	0.2	0.00	89	17
10/13	1200		1640	58	10.4	101	123	7.2	11	5.7	5.6	1.4	0	72		0.9			0.05		19
11/17	1215		2010	45	12.4	102	124	7.4	11	5.9	5.6	1.4	0	71		0.8			0.05		19
12/15	1220		2840	43	12.6	101	120	6.8	12	4.4	4.6	1.1	0	65		1.5			0.04		17
FEATHER RIVER AT NICOLAUS T12N, R3E, Sec. 12																					
1/12	0945		4790	39	11.7	90	108	7.2	12	3.3	4.1	0.8	0	53		3.0			0.01		17
2/9	0850		2410	44	11.4	93	124	7.4	13	6.0	4.8	0.7	0	65		4.0			0.02		15
3/8	1340		2840	50	11.5	101	122	7.4	13	5.2	4.8	0.9	0	65		2.5			0.00		16
4/5	1300		4510	52	11.9	107	91.4	7.4	9.3	6.0	3.7	0.7	0	52		0.6			0.00		17
5/13	1230		12400	61	9.2	93	69.9	7.3	7.6	2.7	2.4	0.8	0	39	3.0	0.5	0.3	0.1	0.10	52	14
6/17	1330		1884	75	8.7	102	95.0	7.4	10	3.3	4.2	1.0	0	53		1.2			0.00		19
7/15	1110		397	79	7.6	93	125	7.5	12	4.9	4.4	1.2	0	64		2.5			0.07		16
8/19	1120		364	79	8.0	98	138	7.6	14	5.6	5.1	1.4	0	75		3.5			0.00		16
9/16	1320		991	69	9.3	102	151	7.4	15	6.0	6.7	1.5	0	86	4.0	3.0	0.2	0.1	0.04	97	19
10/14	1045		1450	64	8.8	92	152	7.3	14	6.2	6.6	1.6	0	81		2.9			0.11		19
11/18	1345			48	11.4	98	145	7.0	14	7.6	5.9	1.5	0	76		2.7			0.03		16
12/16	1110		4020	47	11.6	98	120	6.8	12	4.9	4.6	1.1	0	64		2.5			0.06		16

TABLE [illegible]

COMPLETE [illegible] PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQ[illegible] IN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1[illegible]5 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Dissolved Oxygen Temp F	ppm	sat	Kx10^6	pH	Parts per Million Ca	Mg	Na	K	[illegible]$_3$	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
SOUTH HONCUT CREEK NEAR BANGOR T16N, R5E, Sec. [illegible]																					
1 11	[illegible]		41	11.[illegible]	103	123		7.4	10	.1	1.0	.5	0	61		4.9			.[illegible]		25
/[illegible]	1 [illegible]		6[illegible]	12.[illegible]	[illegible]5	121		7.4	11	.3	[illegible]	[illegible]	0	61		3.8			.21		27
	-745		44	12.[illegible]	[illegible]	[illegible]		.3	11	.3	[illegible]	[illegible]	0	63		4.0			.20		27
[illegible]	0735		4[illegible]	11.7	[illegible]	153		7.4	[illegible]	7.[illegible]	11	[illegible]	0	77		4.8			.02		30
[illegible] 1[illegible]	1430		73	[illegible]	3	147		7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	78	7.[illegible]	4.[illegible]	0.[illegible]	.1	0.[illegible]	10[illegible]	28
[illegible] 1[illegible]	1[illegible]		77	[illegible]	[illegible]	[illegible]		.7	[illegible]	.0	17	[illegible]	[illegible]	99		5.9			.[illegible]		35
[illegible] 1[illegible]	1[illegible]		[illegible]	[illegible]	11[illegible]	3[illegible]		[illegible]	-3	11	2[illegible]	[illegible]	[illegible]	[illegible]		19			.1[illegible]		3[illegible]
11 17	1340	7	7	11.[illegible]	[illegible]	-73		[illegible]	[illegible]	[illegible]	23	0.5	[illegible]	[illegible]		15			.3[illegible]		37
12 1	13[illegible]		[illegible]	12.[illegible]	1[illegible]	151		[illegible]	11	[illegible].1	11	[illegible].4	[illegible]	63		[illegible].3			2.03		3[illegible]
YUBA RIVER AT SMARTVILLE T16N, R6E, Sec. 14																					
1 11	10[illegible]	7[illegible]	.3	11.[illegible]	[illegible]	[illegible]1.[illegible]		7.4	.[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible]	[illegible]		1.[illegible]			0.[illegible]		[illegible]1
[illegible]	[illegible]1		[illegible]	12.[illegible]	[illegible].[illegible]	[illegible]3.		[illegible]	.1	[illegible].5	3.[illegible]	[illegible].5	[illegible]	[illegible]		1.[illegible]			0.02		13
[illegible]/3	[illegible]		3	11.7	[illegible]	[illegible].		.3	.2[illegible]	[illegible].4	3.[illegible]	[illegible].[illegible]	[illegible]	[illegible]		1.[illegible]			0.0[illegible]		13
[illegible]	3[illegible]		[illegible]	11.3	[illegible]	[illegible]3.		[illegible].	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible]	[illegible]		[illegible].[illegible]			0.10[illegible]		[illegible]3
1[illegible]	1600		5[illegible]	[illegible].[illegible]	[illegible]	[illegible].		.3	7.[illegible]	2.2	2.[illegible]	[illegible].5	[illegible]	35	[illegible].	[illegible].[illegible]	[illegible].2	[illegible].2	[illegible].[illegible]	[illegible].	[illegible]1
[illegible].	1510	73[illegible]	[illegible]2	[illegible].[illegible]	[illegible].	[illegible].		.5	[illegible].[illegible]	[illegible].7	2.[illegible]	[illegible].5	[illegible]	3[illegible]		[illegible].[illegible]			[illegible].[illegible]		[illegible]1
[illegible] 14	1345		[illegible]1	[illegible].[illegible]	[illegible]6	[illegible].		[illegible].	[illegible].[illegible]	2.	[illegible].[illegible]	[illegible].5	[illegible]	[illegible]6		[illegible].5			0.[illegible]		13
[illegible] 1[illegible]	1[illegible]5		[illegible]	[illegible].[illegible]	[illegible].	[illegible].		[illegible].	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible]	[illegible]2		[illegible].[illegible]			[illegible].[illegible]		[illegible]1
-3									-3	3.5	3.[illegible]	[illegible].2	[illegible]	[illegible]		[illegible].[illegible]			[illegible].[illegible]		[illegible]1
[illegible] 1[illegible]	15[illegible]		7[illegible]	[illegible].[illegible]	[illegible]2[illegible]			[illegible]	[illegible]	2.6	3.5	[illegible].0	[illegible]	[illegible]	.[illegible]	[illegible].5	.[illegible]	0.1	0.00	[illegible]5	[illegible]2
10 13	143[illegible]	[illegible]6	[illegible]	[illegible].[illegible]	[illegible].	43[illegible]		7.[illegible]	[illegible]6	5.3	[illegible].[illegible]	[illegible].7	[illegible]	[illegible]2		1.[illegible]			0.03		[illegible]1
11 17	1[illegible]5	[illegible]1[illegible]	51	11.3	[illegible].	[illegible]3[illegible]		7.3	17	3.[illegible]	[illegible].3	[illegible].[illegible]	[illegible]	[illegible]		[illegible].1			0.0[illegible]		[illegible]4
12 15	1500	[illegible]7	[illegible]	11.7	[illegible]	[illegible]3		[illegible].	12	3.9	3.[illegible]	[illegible].[illegible]	[illegible]	[illegible]3		[illegible].5			0.03		12
YUBA RIVER AT MARYSVILLE T16N, R4E, Sec. 18																					
1 12	0745	[illegible]0	[illegible]	[illegible].[illegible]	[illegible].	[illegible].		7.2	12	3.7	2.[illegible]	[illegible].5	[illegible]	[illegible]		1.8			0.11		[illegible]1
[illegible] 0	1[illegible]0	[illegible]0[illegible]	[illegible]0	13.2	11[illegible]	[illegible]7.[illegible]		7.[illegible]	22	3.[illegible]	3.[illegible]	[illegible].5	0	[illegible]0		1.0			0.00		13
3	1115	[illegible].[illegible]30	[illegible]	11.3	1[illegible]3	10[illegible]		7.[illegible]	22	[illegible].1	3.[illegible]	[illegible].5	[illegible]	[illegible]2		1.5			0.00		13
[illegible]	[illegible]3	1[illegible]1	[illegible]	11.1	109	[illegible]9.1		7.4	7.9	[illegible].[illegible]	2.7	0.[illegible]	0	[illegible]3		0.[illegible]			[illegible].[illegible]		13
[illegible] 13	[illegible]	[illegible]2[illegible]	[illegible]	[illegible].[illegible]	10[illegible]	[illegible]1.[illegible]		7.2	[illegible].5	[illegible].[illegible]	1.[illegible]	[illegible].[illegible]	[illegible]	3[illegible]	[illegible].	0.[illegible]	0.[illegible]	.1	[illegible].04	47	12
[illegible] 17	[illegible]	07[illegible]	[illegible]	[illegible].[illegible]	[illegible]3	[illegible]5.5		7.3	[illegible].[illegible]	1.1	[illegible].[illegible]	0.6	[illegible]	3[illegible]		[illegible].3			[illegible].[illegible]		[illegible]4
[illegible] 1[illegible]	[illegible]	[illegible]2[illegible]	[illegible]	[illegible].[illegible]	[illegible]6	[illegible].[illegible]		7.3	21	3.[illegible]	3.1	[illegible].[illegible]	[illegible]	50		0.5			[illegible].[illegible]		13
[illegible]. 19	[illegible]	[illegible]-7	[illegible]	[illegible].[illegible]	.1	116		.3	12	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible]	[illegible]2		1.[illegible]			0.1[illegible]		12
[illegible] 1[illegible]	[illegible]:00	7	[illegible]7	[illegible].7	[illegible].	130		7.2	2[illegible]	[illegible].[illegible]	3.7	0.9	[illegible]	73	1[illegible]	[illegible].[illegible]	.[illegible]	[illegible].1	0.1[illegible]	[illegible].	11
10 13	1[illegible]2	[illegible]2	[illegible]	[illegible].7	[illegible].	[illegible]31		7.1	[illegible]4	[illegible].[illegible]	3.7	0.7	[illegible]	67		0.3			[illegible].[illegible]		12
11 1	[illegible]:[illegible]	[illegible]0	[illegible]2	10.[illegible]	[illegible].	[illegible]3		[illegible].	2[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible]	70		1.5			[illegible].[illegible]		13
12/16	[illegible].	[illegible]3	[illegible]	10.1	10[illegible]	[illegible]1[illegible]		[illegible].	13	3.[illegible]	3.[illegible]	0.7	[illegible]	57		1.5			[illegible].[illegible]		[illegible]1
BEAR RIVER NEAR WHEATLAND T13N, R5E, Sec. 3																					
1 12	[illegible]:50		41	12.[illegible]	100	92.4		7.[illegible]	10	[illegible].4	2.7	0.6	0	39		[illegible].[illegible]			.11		13
1/[illegible]	[illegible]:[illegible]0		42	11.0	[illegible]7	1[illegible]		[illegible].	2[illegible]	9.1	[illegible].6	[illegible].5	0	32		4.[illegible]			.[illegible]		12
[illegible]	1[illegible]:[illegible]		55	1[illegible].0	[illegible]4	10[illegible]		[illegible].6	21	[illegible].[illegible]	[illegible].8	1.2	0	70		3.[illegible]			0.00		11
[illegible]	1200		[illegible]0	1[illegible].4	1[illegible]4	351		[illegible].	35	2[illegible]	[illegible].1	1.1	0	158		6.6			.01		[illegible]5
[illegible]/13	1130		[illegible]1	[illegible].0	101	106		.9	11	[illegible].0	3.5	0.7	0	51	[illegible].[illegible]	3.8	[illegible].[illegible]	[illegible].0	0.00	70	13
[illegible]/17	1220		[illegible]1	[illegible].7	108	2[illegible]2		.8	30	12	5.8	1.2	0	127		5.5			.00		[illegible]
[illegible]/15	1[illegible]30		[illegible]1	[illegible].[illegible]	12[illegible]	3[illegible]1		7.6	32	16	[illegible].9	1.2	2	153		[illegible].5			.[illegible]		[illegible]
[illegible]/[illegible]0	1[illegible]20	[illegible]	79	[illegible].2	112	2[illegible]0		[illegible].	31	13	[illegible].[illegible]	1.2	0	[illegible]9		7.[illegible]			.00		10
[illegible]/16	1[illegible]20	[illegible]	7[illegible]	[illegible].0	1[illegible]	305		.[illegible]	37	13	.1	[illegible].9	0	[illegible]1	27	7.3	[illegible].1	[illegible].[illegible]	[illegible].[illegible]	[illegible].	9
1[illegible] 14	1140	[illegible]7	[illegible]7	[illegible].[illegible]	[illegible]7	2[illegible]4		[illegible].	2[illegible]	[illegible]0	7.3	1.[illegible]	0	107		9.0			[illegible].[illegible]		13
11/18	1[illegible]00	[illegible]4	[illegible]	11.0	[illegible]5	2[illegible]3		7.1	2[illegible]	[illegible].[illegible]	[illegible].9	[illegible].[illegible]	0	[illegible]0		10			[illegible].[illegible]		[illegible]4
12/1[illegible]	1[illegible]15	170	[illegible]0	1[illegible].2	[illegible].	[illegible]79		6.[illegible]	19	[illegible].[illegible]	[illegible].0	1.1	0	[illegible]9		[illegible].5			[illegible].[illegible]		13
* **AMERICAN RIVER BELOW NIMBUS DAM** T9N, R6E, Sec. 13																					
[illegible]/1[illegible]	1340		5[illegible]			61			[illegible].8	3.[illegible]	2.3	[illegible].3	[illegible]	32	0.5	3.2	[illegible]			[illegible].[illegible]	1[illegible]
8/3	1[illegible]30		[illegible]8			3[illegible]6			31	12	5.3	1.2	[illegible]	[illegible]2	1.0	62	0			[illegible]30	[illegible]8
1[illegible]/2[illegible]	[illegible]		[illegible]4			74			[illegible].6	2.1	1.1	0.01	[illegible]	32	[illegible].[illegible]	1.[illegible]	0			[illegible].	8
AMERICAN RIVER AT SACRAMENTO T7N, R5E, Sec. 3																					
1 1[illegible]	12[illegible]0	[illegible].10	[illegible]2	11.[illegible]	[illegible]3	1[illegible]3		7.2	10	3.[illegible]	5.1	0.5	0	5[illegible]		[illegible].0			.00		[illegible]1
[illegible] 1[illegible]	0[illegible].[illegible]0	[illegible]:[illegible]62	[illegible]7	1[illegible].[illegible]	[illegible].	[illegible]2.1		7.2	[illegible].3	3.[illegible]	3.7	[illegible].5	0	[illegible]7		3.[illegible]			.01		18
3/1	1[illegible].30	1[illegible]:[illegible]0	[illegible]5	[illegible].0	103	70.[illegible]		7.3	7.6	3.[illegible]	2.[illegible]	[illegible].7	[illegible]	3[illegible]		[illegible].5			.[illegible]		[illegible]1
[illegible]. 19	[illegible]:[illegible]0	1[illegible]	[illegible]3	11.1	[illegible]01	[illegible]3.[illegible]		7.2	3.8	5.5	3.3	[illegible].8	0	3[illegible]		3.2			[illegible].00		[illegible]1
[illegible] 1[illegible]	[illegible]:[illegible]0	[illegible]0	[illegible]3	11.[illegible]	10[illegible]	55.[illegible]		7.2	5.[illegible]	2.3	2.3	0.5	0	30	[illegible].7	1.[illegible]	[illegible].[illegible]	[illegible].0	[illegible].[illegible]	[illegible]2	17
[illegible] 2[illegible]	[illegible]:30	1[illegible]55	[illegible]	[illegible].[illegible]	[illegible]7	3[illegible].7		6.9	3.[illegible]	1.5	2.3	[illegible].6	0	23		[illegible].[illegible]			0.05		24
[illegible]/1	[illegible]:15	12[illegible]0	62	[illegible].[illegible]	[illegible].	57.2		6.[illegible]	[illegible].3	2.2	3.2	1.[illegible]	0	17		[illegible].0			0.00		25
2[illegible]	[illegible]:[illegible]5	[illegible].[illegible]4	[illegible].	[illegible].[illegible]	[illegible].	[illegible]6.8		[illegible].0	[illegible]5.3	[illegible].7	[illegible].9	[illegible].[illegible]	0	[illegible]7		[illegible].5			0.11		15
[illegible] 1[illegible]	1330	162	[illegible]1	[illegible].[illegible]	[illegible]7	63.1		[illegible].3	[illegible].0	2.1	2.2	1.0	[illegible]	34	1.[illegible]	1.[illegible]	[illegible].	[illegible].[illegible]	0.02	[illegible]4	15
[illegible]/[illegible]	1330	[illegible]77	[illegible]6	[illegible].[illegible]	[illegible]3	72.[illegible]		7.1	[illegible].1	2.4	2.[illegible]	1.1	[illegible]	3[illegible]		1.[illegible]			[illegible].00		[illegible]7
11 1[illegible]	[illegible].30		52	[illegible].[illegible]	[illegible]0	73.[illegible]		[illegible].1	[illegible].[illegible]	1.[illegible]	3.2	1.0	[illegible]	37		3.[illegible]			[illegible].0		10
12/16	1520	2[illegible]	51	10.1	[illegible]0	[illegible].1		[illegible].1	[illegible].[illegible]	2.2	3.2	1.1	[illegible]	3[illegible]		3.3			[illegible].[illegible]		18
SACRAMENTO RIVER AT SNODGRASS SLOUGH T6N, R4E, Sec. 27																					
[illegible]/21	1[illegible]30		45	1[illegible].3	[illegible]5	157		7.2	[illegible]1	[illegible].[illegible]	1[illegible]	[illegible].[illegible]	[illegible]	[illegible]3	[illegible].1	11	1.[illegible]	[illegible].5	[illegible].[illegible]	[illegible].3	29
[illegible]/1[illegible]	1[illegible]00		[illegible]7	1[illegible].3	[illegible].1	22[illegible]		7.4	[illegible]7	[illegible].1	15	1.1	[illegible]	[illegible]	17	12	[illegible].[illegible]	[illegible].1	[illegible].[illegible]	1[illegible]	[illegible]
3/1[illegible]	1[illegible]30		55	[illegible].[illegible]	[illegible].	1[illegible]2		7.4	[illegible]3	[illegible].5	[illegible].[illegible]	[illegible].1	[illegible]	[illegible]	[illegible]	[illegible].[illegible]	[illegible].5	[illegible].1	[illegible].1[illegible]	1[illegible]5	[illegible]
[illegible]/1[illegible]	[illegible]:[illegible]		57	[illegible].[illegible]	15[illegible]	[illegible].		7.3	[illegible]3	[illegible].[illegible]	[illegible].	[illegible].3	[illegible]	[illegible]	[illegible].[illegible]	[illegible].	[illegible].[illegible]	1.1	[illegible].[illegible]	1[illegible]3	[illegible]
[illegible] 1[illegible]	[illegible]:[illegible]0		[illegible]4	[illegible].[illegible]	[illegible]01	1[illegible]4		7.4	12	[illegible].3	1[illegible]	[illegible].[illegible]	[illegible]	[illegible]	[illegible]0	11	[illegible].[illegible]	[illegible].1	[illegible].[illegible]	1[illegible]4	[illegible]9
[illegible] 1[illegible]	[illegible]:[illegible]0		7[illegible]	[illegible].4	[illegible]3	[illegible]0[illegible]		7.4	14	[illegible].1	15	[illegible].[illegible]	[illegible]	[illegible]	12	11	0.[illegible]	[illegible].[illegible]	[illegible].[illegible]	11[illegible]	35
[illegible] [illegible]	[illegible]:13		73	[illegible].2	3	[illegible]0		7.3	14	7.[illegible]	15	[illegible].5	0	[illegible]	12	12	[illegible].[illegible]	[illegible].3	0.13	1[illegible]7	33
[illegible] [illegible]	[illegible]:[illegible]0		[illegible]1	7.[illegible]	1	17		.3	[illegible]5	7.[illegible]	17	[illegible].3	[illegible]	[illegible]	1[illegible]	12	[illegible].[illegible]	[illegible].1	0.11	1[illegible]8	3[illegible]
[illegible]/3	1[illegible]30		[illegible]	[illegible].[illegible]	[illegible]	[illegible]4[illegible]		.4	[illegible]7	11	15	[illegible].[illegible]	11[illegible]	1[illegible]	1[illegible]	[illegible].[illegible]	[illegible].1	0.[illegible]	1[illegible]4	[illegible]
1/2[illegible]	13[illegible]		6[illegible]	[illegible].9	[illegible].[illegible]	[illegible]3.[illegible]		.3	1[illegible]	[illegible].[illegible]	1[illegible]	[illegible].[illegible]	[illegible]	[illegible]2	[illegible].[illegible]	11	[illegible].[illegible]	[illegible].3	[illegible].01	12[illegible]	3[illegible]
11	[illegible]4		[illegible]6	[illegible].[illegible]	[illegible].	1[illegible]4		[illegible].	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible]	[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].02	[illegible]4	[illegible]
1[illegible]/2[illegible]	1[illegible]0		[illegible]	[illegible].[illegible]	[illegible].	[illegible]7.[illegible]		[illegible].1	[illegible].[illegible]	[illegible].3	[illegible].[illegible]	1.3	[illegible]	[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	1.[illegible]	[illegible].[illegible]	[illegible].	[illegible]9

* Data [illegible] from [illegible]. S. Bureau [illegible] Reclamati[illegible] compilation. Daylight Savings Time in effect April [illegible], 19[illegible], and [illegible] October [illegible], 1[illegible].

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Dissolved Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10^6	pH	Parts per Million Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
* SACRAMENTO RIVER AT GREENS LANDING (NEAR HEAD OF SNODGRASS SLOUGH) T6N, R4E, Section 22F																					
1/3	1230			47			255		18	11	17	1.6	0	92	21	15	0			164	29
3/1	1300			48			157		11	8.3	9.2	1.6	0	70	7.2	11	0			106	24
4/1	1115			56			168		11	7.1	9.4	1.2	0	62	12	12	0			110	26
4/27	1053			53			156		12	6.5	8.7	1.6	0	61	10	13	0.31			118	25
6/2	1145			63			163		15	6.1	6.9	0	0	71	6.7	9.9	0			112	19
6/29	1255			70			186		12	8.2	14	0.8	0	92	9.1	13	0			132	32
7/27	1310			72			205		13	8.1	13	1.6	0	82	4.8	17	0			140	30
8/31	1130			73			234		16	10	18	2.0	0	98	12	17	0			206	32
9/28	1215			66			235		17	10	17	1.2	0	104	9.1	16	0.6			178	29
10/25	1230			63			189		15	7.1	12	2.7	0	79	6.7	13	3.7			130	27
11/30	1212			50			174		13	7.1	9.2	0	0	68	13	9.2	0			124	25
12/28	1325			49			53		6.4	1.0	2.5	0	0	20	7.2	2.5	3.7			86	22
DELTA-CROSS CHANNEL NEAR WALNUT GROVE																					
1/21	1430			44	10.6	86	145	7.3	12	5.6	9.2	1.0	0	63		7.0			0.21		27
2/14	1030			50	10.2	90	253	7.4	18	10	18	1.2	0	98		19			0.06		31
3/14	1030			52	9.8	89	157	7.3	13	7.4	9.2	1.1	0	74		7.0			0.12		24
4/18	0940			56	8.7	83	160	7.4	11	6.4	9.6	1.4	0	78		8.2			0.16		27
5/16	1230			61	9.3	93	149	7.3	11	4.8	11	1.0	0	64	10	8.2	0.7	0.1	0.06	96	33
6/20	1145			69	8.9	98	190	7.6	12	7.6	15	1.2	0	81		12			0.06		34
7/20	0815			70	8.0	89	210	7.0	13	8.4	17	1.9	0	76		12			0.14		35
8/26	0950			72	6.3	72	220	7.3	15	7.9	17	1.3	0	99		12			0.12		34
9/23	0945			65	6.0	63	257	7.3	18	11	17	1.8	0	118	14	14	0.6	0.2	0.07	161	29
10/20	1220			64	6.6	69	188	7.3	15	7.4	12	1.6	0	88		7.0			0.06		27
11/25	1250			48	8.8	76	141	7.3	10	4.9	8.9	1.5	0	52		8.2			0.08		29
12/22	1115			53	9.5	87	116	7.3	8.8	4.5	6.9	2.2	0	48		6.1			0.00		26
* SACRAMENTO RIVER AT TOLAND LANDING T3N, R2E, Section 21																					
1/31	1100			46			264				18					18				168	30
3/1	1110			48			212				14					17				158	29
3/31	1002			57			226				13					18				166	25
4/27	1230			56			185				10					12				128	23
6/1	1055			66			144													120	
6/29	1230			66			208													182	
7/27	1020			68			1108													650	
8/31	1025			68			873													554	
9/28	1340			64			1165													660	
10/25	1012			61			280													174	
11/30	1020			50			184													138	
12/28	1505			50			122				5.1					6.4				108	18
SACRAMENTO RIVER AT RIO VISTA T4N, R3E, Sec. 31																					
1/21	1200			44	10.2	83	164	7.2	12	7.1	10	1.3	0	71		9.5			0.19		26
2/14	1130			50	10.0	88	256	7.4	18	12	18	1.2	0	104		16			0.11		29
3/14	1300			57	9.6	92	222	7.4	17	9.1	14	1.1	0	91		13			0.16		27
4/18	1120			58	9.3	90	179	7.5	12	8.3	11	1.2	0	81		9.2			0.04		27
5/16	1440			62	8.8	90	149	7.4	11	6.0	9.6	0.9	0	66	3.1	11	0.6	0.1	0.09	94	28
6/20	1400			67	8.9	96	161	7.7	10	7.1	11	1.1	0	70		10			0.08		30
7/20	1100			70	8.0	89	229	6.8	13	9.6	18	1.9	0	76		14			0.21		34
8/25	1410			72	8.3	95	222	7.5	12	10	18	1.5	0	100		13			0.11		35
9/23	1800			63	7.2	74	279	7.5	19	11	23	2.0	0	126	17	16	0.5	0.3	0.01	175	34
10/20	1110			62	7.6	77	207	7.5	14	8.7	14	1.5	0	95		9.9			0.09		30
11/25	1130			50	9.1	80	190	7.3	15	7.0	13	1.7	0	90		10			0.03		29
12/22	0900			52	9.1	82	109	7.1	88	4.5	6.1	2.3	0	43		4.5			0.12		23
* SACRAMENTO RIVER AT COLLINSVILLE T3N, R1E, Section 27																					
4/27	1302			57			460				51					90				272	48
6/1	1020			66			150				10					11				104	29
6/29	1100			66			1334				191					343				812	62
7/27	1050			68			6320				1079					1960				3944	74
8/31	1052			70			3429				469					951				2036	59
9/28	1420			65			4162				667					1225				2534	70
10/25	1040			62			2477				451					781				1568	79
SACRAMENTO RIVER AT MALLARD SLOUGH T2N, R1W, Sec. 1																					
3/31	1120			58			3831													2324	
5/2	1205			59			454				54					95				298	52
5/31	1115			67			552				72					21				350	57
6/27	1155			66			3736				566					1065				2312	66
7/25	1105			67			11670				2015					3728				7742	75
8/29	1155			67			10670				1725					3426				6686	70
9/26	1150			66			8351				1265					2634				5336	66
10/31	1135			63			6626				1030					2094				4082	68
11/28	1050			54			3289				833					870				1826	100
12/27	1135			52			138				8.7					12				112	27
* CARQUINEZ STRAITS AT MARTINEZ T2N, R3W, Sec. 13																					
3/31	1200			58			19770													14390	
5/2	1300			58			13998													9426	
5/31	1030			65			11070													7400	
6/27	1005			65			16846													11568	
7/25	1018			65			29610													21415	
8/29	1250			65			27430													19766	
9/26	1240			66			24030													28840	
10/31	1255			62			25480													19890	
11/28	1210			54			26040													16640	
12/27	1030			52			186				17					24				152	40

* Data copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955, through September 25, 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	Dissolved G.H. Feet	Flow c.f.s.	Temp °F	Oxygen ppm	Oxygen %sat	Kx10⁶	pH	Parts per Million Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
CLEAR LAKE AT CLEAR LAKE OAKS T14N, R10W, Sec. 24																					
1/12	1530			45	10.6	87	290	8.0	26	16	11	2.0	0	166		7.2			0.88		15
2/9	1420			48	10.3	88	294	7.6	26	17	12	2.0	0	166		8.8			0.79		16
3	0845			48	10.3	89	291	7.9	2	16	12	2.2	0	164		7.0			0.64		16
4/6	0830			52	10.0	91	286	8.0	21	18	12	2.2	0	168		6.4			0.82		17
5/17	1300			63	10.2	105	294	8.1	25	17	11	2.2	0	168	12	6.0	0.4	0.0	0.87	158	15
6/21	1300			73	10.8	124	299	7.8	29	15	12	2.1	5	164		6.5			0.87		16
7/19	1310			76	10.5	126	308	7.8	22	20	12	2.3	0	180		7.0			1.1		16
8/23	1240			79	11.6	142	311	8.2	26	18	13	2.3	11	164		7.0			1.2		16
9/20	1150			72	10.2	138	321	8.0	20	22	13	2.5	0	175	15	7.5	3.7	0.2	1.4	176	16
10/18	0930			64	10.5	110	340	7.9	29	19	14	2.5	0	187		7.1			1.3		17
11/21	1400			53	11.6	106	333	7.4	29	19	14	2.5	4	181		7.5			1.3		16
12/12	1445			51	13.3	116	341	6.8	2	20	14	2.5	0	185		8.5			1.3		16
CLEAR LAKE AT LAKEPORT T14N, R8W, Sec. 28																					
1/12	1420			5	10.0	82	236	7.8	26	15	11	1.9	0	160		6.5			0.65		16
2/5	1520			50			281	8.0	25	16	11	1.9	0	159		6.5			0.74		15
3/8	0930			50	11.3	100	279	8.3	22	17	11	2.2	0	158		6.5			0.36		16
4/6	0915			56	10.0	95	297	8.1	22	17	11	2.0	0	164		6.0			0.93		16
5/17	1700			66	9.6	92	288	8.2	24	17	11	2.1	0	166	10	6.0	0.5	0.0	0.70	155	15
6/21	1350			76	9.8	115	302	7.9	30	14	12	2.2	0	174		6.3			0.80		16
7/19	1410			80	9.5	111	308	7.8	24	19	12	2.6	0	179		7.0			0.95		16
8/23	1330			83	8.3	106	323	8.1	27	19	13	2.3	0	190		7.5			1.1		16
9/20	1240			76	15.4	182	337	8.2	28	19	12	2.5	0	195	11	7.2	0.1	0.4	1.1	184	15
10/18	1045			63	9.0	93	354	8.0	29	19	14	2.5	0	212		6.1			1.1		17
11/21	1450			51	9.2	82	331	7.1	28	19	14	2.5	0	184		8.0			1.2		17
12/12	1600			51	9.3	83	323	6.8	28	18	13	2.5	0	182		8.5			1.1		16
CACHE CREEK BELOW LOWER LAKE																					
1/13	1000			39	10.5	80	247	7.3	21	12	11	1.9	0	123		5.2			0.37		19
2/10	0830			41	10.0	78	268	7.8	24	13	13	1.7	0	130		5.5			0.37		20
3/6	1030			54	10.4	98	313	7.8	25	17	15	2.0	0	142		6.8			0.32		19
5/17	1100			62	8.0	82	322	7.8	34	14	13	2.3	0	183	12	7.5	0.8	0.0	0.96	177	16
6/21	1050			74	9.0	104	311	7.8	29	16	13	2.2	0	179		7.2			1.0		17
7/19	1115		449	73	8.2	94	311	7.8	27	18	13	2.5	0	184		7.0			0.90		16
8/23	1020		356	75	8.1	95	324	8.0	26	21	13	2.2	0	192		8.0			1.2		16
9/20	0930		78	66	8.0	85	349	7.5	27	20	13	2.9	0	200	11	7.5	0.1	0.5	1.2	185	16
10/17	1640		1	64	6.4	67	361	7.2	31	20	15	2.8	0	198		7.2			1.2		17
11/21	1130		1	49	7.5	65	355	7.3	30	20	15	2.9	0	200		8.5			1.3		17
12/12	1345			51	9.8	87	351	6.8	30	20	15	2.6	0	199		8.0			1.1		17
NORTH FORK CACHE CREEK NEAR LOWER LAKE T14N, R6W. Sec. 31																					
1/12	1500			46	13.4	112	426	8.3	28	24	25	1.2	14	176		35			1.9		24
2/9	1330				12.3		359	8.4	25	21	20	1.9	7	168		24			1.5		22
3/9	0745			50	9.8	86	379	8.0	25	22	23	1.2	0	185		24			1.7		25
4/6	0730			48	10.4	89	401	8.2	24	25	26	1.3	0	212		28			2.1		25
5/17	1200			70	9.0	100	352	8.2	25	20	20	1.3	5	174	11	14	0.5	0.0	1.4	205	23
6/21	1200			78	9.5	114	458	7.9	33	23	30	1.5	15	193		38			2.7		27
7/19	1210		4	83	9.3	118	518	7.8	33	27	36	2.1	10	211		52			3.7		29
8/23	1120		1	80	8.8	108	601	7.8	36	32	40	2.0	0	254		68			4.9		28
9/20	1045		2	69	10.6	107	672	7.7	21	46	44	2.0	0	257	13	87	0.3	0.1	4.5	366	28
10/18	0845		2	60	8.9	89	667	7.4	40	29	50	1.9	0	251		84			5.6		33
11/21	1315		4	56	13.5	128	603	7.5	35	27	53	2.2	9	193		83			6.1		37
12/12	1250		69	51	10.9	97	632	6.8	37	34	44	1.7	6	222		80			4.7		29
CACHE CREEK NEAR CAPAY T10N, R2W, Sec. 8																					
1/14	0930			41	12.5	98	825	8.3	41	34	71	2.9	10	264		100			3.3		39
2/25	1020			52	10.0	91	725	8.1	39	36	61	2.7	10	260		80			2.0		35
3/22	1205			59			729		11	50	61	0.8	0	276		78			1.6		36
4/6	1630			63	10.4	107	734	8.4	37	38	69	3.5	8	280		88			2.4		37
5/16	1230			76	9.2	108	548	8.2	37	27	39	2.7	0	266	22	40	0.6	0.1	1.5	312	29
7/18	1030			80	9.2	114	496	7.8	33	27	35	2.7	4	253		32			1.5		28
9/19	1300		125	69	9.1	100	488	7.6	33	23	30	2.9	0	224	17	36	2.4	0.3	1.6	264	26
10/17	1120		10	68	9.9	108	680	7.8	44	32	57	2.5	9	262		73			2.1		34
11/24	1000		18	50	10.6	98	765	7.4	50	32	72	3.3	5	288		94			1.8		37
12/13	1220		83	50	11.1	98	834	6.8	42	37	82	3.3	7	248		128			4.0		41
PUTAH CREEK NEAR WINTERS T8N, R2W. Sec. 28																					
1/13	1445			45	12.2	100	449	8.2	22	11	13	0.9	10	240		12			0.29		11
2/10	1250			50	11.7	103	464	8.4	24	14	14	1.0	12	250		10			0.36		11
3/9	1530			50	9.8	87	440	8.4	23	10	14	1.0	9	239		10			0.12		12
4/6	1450			61	10.4	105	517	8.4	25	19	18	1.6	12	295		12			0.52		13
5/16	1330			70	10.4	116	467	8.4	24	11	15	1.3	0	280	23	10	0.5	0.1	0.38	280	12
6/20	1320			78	9.2	111	603	7.8	37	18	28	1.8	13	334		19			0.85		17
7/18	1130			74	9.6	111	682	7.8	23	65	37	2.5	18	372		28			1.1		20
8/22	1250			86	8.5	105	814	8.2	33	70	50	3.1	25	412		46			1.7		22
9/19	1410		4	70	2.0	22	789	8.0	29	64	55	2.6	25	351	54	50	0.2	0.4	1.7	476	26
10/17	1300		2	65	9.7	102	798	8.1	37	64	48	2.7	13	415		35			1.4		23
11/24	0900		15	49	11.9	102	741	7.5	37	59	41	1.8	6	384		32			1.4		21
12/13	1110		13	49	11.4	99	503	6.9	27	41	23	1.5	0	287		18			0.71		17
• **PUTAH CREEK NEAR WINTERS T8N, R3W. Sec. 28**																					
3/25	1315	4.9		61			50				14					13			0.4	304	12
6/23	1130	3.4		68			619				27					23			1.18	406	18
9/22	1415	3.		62			695				37					62			0.65	432	23
12/	0930	.7	116	4			619				27									362	

• Data copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955 through Sept. 25, 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10⁶	pH	Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
* CACHE SLOUGH BELOW LINDSAY SLOUGH T5N, R3E, Sec. 31																					
1/31	1130			46			282				20					20				190	31
5/12	1330			64			168				9.2					9.9				118	24
7/27	1120			71			214				15					15				172	30
11/2	1128			60			244				12					13				136	21
LINDSEY SLOUGH NEAR RIO VISTA																					
1/21	1245			46	10.3	86	334	7.5	19	15	25	1.8	0	119		27			0.41		33
2/14	1300			51	10.1	90	338	7.4	20	16	27	1.5	0	124		25			0.20		34
3/14	1340			54	9.5	88	311	7.7	18	15	24	2.9	0	118		24			0.18		32
4/18	1230			58	9.0	87	202	7.4	14	8.8	13	1.5	0	89		12			0.11		28
5/16	1350			68	9.4	102	187	7.7	13	8.6	12	1.3	0	78	15	12	0.7	0.1	0.05	121	27
6/20	1315			71	8.7	97	175	7.6	11	7.7	13	1.2	0	76		11			0.12		32
7/20	1000			70	8.1	90	230	7.2	15	9.4	20	2.2	0	91		13			0.12		36
8/25	1500			72	8.1	92	230	7.5	15	9.1	18	1.6	0	101		14			0.09		34
9/23	0835			63	6.7	69	349	7.5	20	15	29	1.9	0	138	24	26	0.6	0.3	0.25	209	36
10/20	1000			62	7.3	74	236	7.3	15	10	17	1.9	0	104		14			0.15		31
11/23	1305			48	9.1	78	212	7.6	15	8.4	15	2.0	0	97		12			0.09		30
12/22	1000			53	8.8	80	205	7.3	12	10	15	3.3	0	77		12			0.16		30
COSUMNES RIVER NEAR MICHIGAN BAR T8N, R8E, Sec. 36																					
1/18	1355			42	11.9	94	105	7.1	10	4.4	4.7	0.6	0	51		1.8			0.00		19
2/15	1030			46	11.6	97	122	7.2	11	6.1	4.6	0.9	0	60		2.5			0.02		16
3/15	0900			47	11.8	100	82.2	7.2	8.0	3.9	3.6	0.9	0	43		1.5			0.03		17
4/19	1015			48	11.7	100	116	7.4	8.2	7.2	4.2	0.9	0	64		1.4			0.00		15
5/20	1210			58	9.7	94	59.9	7.7	8.8	0.5	3.6	1.7	0	36	2.7	0.5	0.3	0.1	0.00	55	23
6/24	1220			72	10.0	113	66.8	8.0	6.8	2.7	3.4	1.0	0	40		0.8			0.06		20
7/18	0830			72	6.3	72	111	6.8	8.1	4.3	5.6	1.7	0	46		2.5			0.24		23
8/22	1000	4	80	10.7	132	120	8.0	11	5.7	4.8	1.3	3	65		2.5				0.00		17
9/20	1120	12	71	10.1	114	139	8.1	13	6.1	53	1.3	0	77	2.0	2.5	0.0	0.2		0.02	84	16
10/17	1010	13	64	9.1	95	132	7.7	11	6.3	5.6	1.3	0	76		3.0				0.08		18
11/21	0920	60	49	10.1	88	96.8	7.3	9.2	3.4	4.2	1.4	0	48		3.5				0.00		19
12/19	1030	352	49	10.5	92	106	7.3	9.2	4.6	4.4	1.0	0	47		3.0				0.11		18
MOKELUMNE RIVER NEAR LANCHA PLANA T4N, R10E, Sec. 4																					
1/18	1530		812	47	10.9	92	76.9	6.7	6.1	2.4	3.4	0.7	0	22		3.5			0.00		22
2/15	1140		666	50	11.3	100	51.4	7.0	5.1	1.3	2.8	0.6	0	24		3.0			0.01		25
3/15	1030		59	50	11.9	105	81.5	6.8	6.3	2.3	3.4	0.8	0	24		3.5			0.00		22
4/19	1200		698	48	12.0	103	48.6	6.8	3.2	2.6	3.1	0.8	0	24		3.2			0.02		26
5/20	1040		704	49	11.4	99	53.4	7.2	7.2	0.3	4.0	1.7	0	25	2.6	3.5	0.2	0.2	0.00	43	29
6/24	1030		649	49	11.4	99	50.1	7.1	5.7	2.1	3.1	0.7	0	27		3.5			0.05		22
7/18	1000		649	54	11.5	107	74.9	6.8	6.0	1.5	4.8	1.6	0	19		3.0			0.10		31
8/22	1130		654	56	11.2	107	54.1	7.2	2.8	2.9	3.1	0.7	0	27		3.0			0.00		25
9/20	1350		654	56	10.0	95	45.3	7.5	5.7	0.3	2.2	0.7	0	21	1.4	1.9	0.0	0.1	0.14	34	23
10/17	1330		649	58	8.8	86	41.3	7.0	3.8	1.0	2.6	0.7	0	21		0.7			0.08		23
11/21	1120			54	9.5	88	40.9	7.3	4.0	0.5	2.8	0.7	0	19		2.2			0.00		32
12/19	1240			52	10.2	92	42.9	7.0	3.2	1.5	2.3	0.6	0	17		3.2			0.12		25
* MOKELUMNE RIVER BELOW COSUMNES RIVER T5N, R5E. Sec. 29B																					
4/1	1050			57			94				3.7					5.0				112	17
4/27	1030			53			111				3.7					3.9				100	14
6/2	1110			67			58				3.0					3.9				60	22
6/29	1220			72			102				5.5									106	23
7/7	1345			73			190													130	
7/27	1335			74			206				15					15				178	32
9/1	1000			74			227				17					17				140	33
9/28	1135			66			93				6.0					5.7				62	28
10/25	1300			63			80				3.9					5.7				50	21
11/30	1300			50			56				3.4					3.9				52	26
MOKELUMNE RIVER AT WOODBRIDGE T4N, R6E. Sec. 24																					
1/19	1110		913	44	11.2	91	68.9	6.7	6.5	1.7	3.8	1.6	0	23		3.0			0.03		25
2/15	1730		445	50	10.6	93	54.6	7.0	5.8	1.7	3.0	0.7	0	24		2.8			0.05		22
3/17	1520		366	54	10.2	95	59.8	7.1	5.9	1.3	3.4	0.9	0	26		3.0			0.00		20
4/21	1350		212	55	10.0	94	65.5	7.2	4.0	3.2	3.4	0.8	0	26		3.4			0.03		24
5/20	0820		19	68	9.2	100	78.9	6.8	8.4	2.0	4.5	0.9	0	37	4.2	4.2	0.5	0.2	0.01	58	25
6/23	1230		12	70	8.3	92	85.4	7.0	7.6	2.2	4.2	0.9	0	35		3.2			0.02		24
7/15	1100		11	70	8.2	91	81.3	6.8	6.4	2.2	4.9	1.4	0	27		4.0			0.14		28
8/26	0820		18	63	8.5	88	67.9	7.1	6.4	2.2	3.8	0.7	0	33		2.8			0.00		24
9/16	1150		261	63	8.8	91	56.5	7.3	4.9	1.3	3.2	0.7	0	26	3.0	1.4	0.00	0.1	0.03	41	27
10/14	0925		288	61	8.8	89	52.2	7.0	4.6	1.9	2.6	0.8	0	25		1.9			0.00		22
11/18	1000			51	9.7	87	41.4	6.9	3.9	1.5	2.3	0.7	0	23		2.2			0.00		23
12/16	0910		300	49	10.3	90	43.1	6.9	4.4	1.7	2.5	0.7	0	20		1.9			0.00		22
* MOKELUMNE RIVER BELOW GEORGIANA SLOUGH T3N, R4E, Sec. 7																					
4/1	1230			57			161				6.9					8.5				134	19
4/27	1010			55			133				6.2					6.7				104	20
6/2	1310			66			146				9.2					11				140	27
6/29	1335			70			204				17					16				156	36
7/27	1200			72			213				15					15				190	31
9/1	1230			74			240				17					15				160	31
9/28	1050			66			256				20					18				162	34
10/25	1145			63			192				12					11				126	27
11/30	1125			50			213				21					12				144	43

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TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10⁶	pH	Parts per Million Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
CALAVERAS RIVER NEAR JENNY LIND T3N, R10E, Sec. 22																					
1/18	1700		2850	42	11.8	93	138	7.2	14	5.6	5.1	1.1	0	62		3.0			0.10		16
2/15	1300		91	52	11.2	101	230	7.3	26	9.6	7.6	1.2	0	110		6.0			0.03		14
3/15	1130		6	57	10.0	98	311	7.5	22	20	11	1.4	0	148		10			0.04		15
4/19	1320		104	53	11.3	108	198	6.6	15	12	6.4	1.2	0	98		4.8			0.05		14
5/20	0940		109	62	9.7	100	185	.1	23	5.5	7.6	2.9	0	102	9.6	3.5	0.4	0.1	0.00	120	16
6/24	0910		162	62	9.6	98	197	7.7	23	7.2	6.2	1.4	0	109		4.2			0.04		13
7/18	1115		171	72	9.0	102	222	7.4	23	8.9	8.3	2.5	0	108		5.0			0.20		16
8/22	1300			81	6.5	81	254	7.4	27	12	7.4	1.9	0	141		5.8			0.12		12
12/19	1400		84	51	9.[illegible]	88	243	7.3	27	[illegible].9	[illegible].3	1.7	0	10[illegible]		9.0			0.17		15
SAN JOAQUIN RIVER AT FRIANT T11S, R21E. Sec. 7																					
1/10	1350		116	49	11.4	99	70.1	7.0	6.9	0.6	6.0	1.0	0	26		6.0			0.12		39
2/11	0900		53	46	11.1	93	70.9	6.[illegible]	6.2	[illegible].9	6.3	0.8	0	29		5.8			0.04		41
3/9	[illegible]30		75	[illegible]2	11.6	105	70.0	7.2	5.9	0.3	6.1	1.1	0	28		4.5			0.06		41
4/12	0850		133	49	13.0	113	46.6	7.[illegible]	1.0	2.1	4.6	0.8	0	22		4.4			.02		41
5/10	0940		80	50	12.1	107	59.9	7.3	2.5	2.4	5.8	0.7	0	28	1.2	3.4	0.0	0.2	0.02	45	42
6/14	0845		171	49	12.4	108	50.9	7.2	4.7	0.7	4.7	0.8	0	22		3.8			0.07		40
7/13	0715		190	52	11.5	104	67.5	7.2	4.2	1.0	6.7	1.2	0	24		5.2			0.02		45
8/18	1100		167	54	12.3	114	521	.2	3.8	1.3	4.8	.6	0	22		3.5			0.02		40
9/15	0750		169	48	10.0	86	56.5	7.1	4.6	0.5	4.5	0.6	0	22	2.0	2.6	0.2	0.2	0.07	37	41
10/12	0900		124	49	11.0	97	53.0	.1	3.9	1.[illegible]	5.1	1.0	0	22		4.2			0.05		42
11/16	0845		62	45	10.2	84	55.5	6.9	4.2	0.4	[illegible].3	0.7	0	20		4.2			0.00		42
12/14	0920		774	48	11.3	97	47.3	7.0	4.9	0.4	4.2	0.7	0	20		3.2			[illegible].1		38
* **SAN JOAQUIN RIVER AT WHITEHOUSE T13S, R15E, Sec. 25C**																					
3/29	0920		1	60			127				8.7					8.2				72	30
4/12	1335	0.47	38	58			89		6.6	2.9	7.4	1.2	0	37	13	6.7	0			58	35
4/26	1315		28	51			95													68	
5/10	1230		55	65			97													64	
5/23	1300			74			101									7.5				74	
5/24	0920		29	57			104													70	
6/7	1030		20	68			166													122	18
6/28	1130		44	63			94		18	5.4	6.9	1.2	0	84	2.9	7.1	0			60	
7/12	1045	3.28	39	67			93													54	
7/26	1300	-0.05	17	68			76													52	
8/16	1120		35	72			101													66	
8/30	1200		30	74			89		4.8	2.2	[illegible].2	1.2	0	35	1.0	5.7	0.6			72	38
9/13	0950		30	65			83													58	
9/27	0900		22	64			105													66	
10/11	1100		22	60			135													108	
SAN JOAQUIN RIVER NEAR MENDOTA T13S. R15E. Sec. 7																					
1/12	0945			42	11.8	93	83.0	6.9	7.7	1.3	8.3	0.9	0	39		5.2			0.17		41
2/9	1120			54	9.7	90	184	7.2	13	4.3	18	1.6	0	68		17			0.02		43
3/10	0940			56	10.0	95	692	7.7	35	17	[illegible]	2.8	0	100		104			0.38		51
4/11	1045			63	9.8	100	517	7.8	30	1.5	54	2.7	0	100		76			0.17		46
5/9	1545			70	9.5	106	537	8.0	27	17	59	3.2	0	114	52	81	1.0	0.3	0.18	328	48
6/13	1445			76	8.8	104	401	7.8	23	9.0	42	2.5	0	82		60			0.17		48
7/14	1200			80	8.0	99	303	7.2	19	8.7	31	3.0	0	76		31			0.16		44
8/16	1045			79	[illegible].2	100	466	7.4	21	12	48	2.9	0	95		73			0.09		50
9/12	1630			79	7.3	89	595	7.7	22	15	70	3.4	0	102	40	106	0.9	0.2	0.18	327	55
10/10	1615			68	8.1	88	561	7.5	26	16	69	3.3	0	122		96			0.21		53
11/16	1100			49	[illegible].9	96	899	7.7	46	21	99	4.4	0	158		152			0.36		51
12/12	1400			51	10.9	97	741	7.5	36	18	90	3.9	0	142		125			0.25		53
DELTA-MENDOTA CANAL NEAR MENDOTA T13S, R15E, Sec. 19																					
1/12	0910			43	11.5	93	946	8.1	45	21	116	3.2	0	136		132			0.61		55
2/9	1045			50	12.2	108	1230	8.3	58	27	162	3.2	0	141		145			0.82		58
3/7	1720			55	10.6	100	596	8.1	30	14	64	2.5	0	95		88			0.18		51
4/11	1710			62	9.5	98	456	8.0	25	15	42	2.5	0	95		60			0.15		42
5/9	1620			65	9.4	100	425	7.8	24	13	42	2.7	0	98	46	53	1.9	0.3	0.17	277	44
6/13	1520			73	8.9	102	307	7.8	20	8.3	28	2.1	0	79		36			0.17		41
7/14	1230			77	8.0	96	456	7.0	26	13	45	3.1	0	95		65			0.18		44
8/16	1020			75	7.5	98	455	7.5	21	11	51	2.8	0	93		73			0.04		52
9/12	1740			76	7.4	88	599	7.5	22	14	73	3.6	0	98	42	108	1.0	0.2	0.18	331	57
10/10	1705			65	7.9	84	823	7.8	40	20	95	3.6	0	156		143			0.26		53
11/16	1155			49	9.6	84	866	7.8	42	21	104	4.2	0	157		146			0.28		53
12/12	1445			50	10.4	92	954	.5	50	21	117	5.2	0	157		166			0.35		54
SAN JOAQUIN RIVER NEAR DOS PALOS T11S, R13E, Sec. 12																					
1/12	1125			44	11.6	95	169	7.1	12	2.8	18	1.1	0	53		19			0.16		48
2/9	0940			52	10.5	95	283	.3	17	6.2	31	1.9	0	79		35			0.04		49
3/10	1130			58	[illegible].4	92	630	[illegible].6	32	14	71	2.8	0	96		91			0.34		52
4/11	1530			[illegible]4	10.3	103	549	8.0	20	1.7	57	[illegible].9	0	100		80			0.16		46
[illegible]/9	1420			72	[illegible].7	110	558	8.0	33	13	58	3.0	0	115	55	80	1.2	0.4	0.21	320	43
6/13	1320			74	[illegible].7	100	442	7.7	26	10	45	2.5	0	92		65			0.13		47
7/14	1300			83	[illegible].8	99	392	7.0	26	10	38	2.8	0	94		47			0.16		43
[illegible]/16	0920			74	[illegible].0	93	482	[illegible].3	22	12	54	2.9	0	101		73			0.10		52
[illegible]/12	1435			76	5.5	65	610	[illegible].3	25	15	73	3.3	0	106	43	110	0.6	0.1	0.18	339	55
1[illegible]/10	1445			66	[illegible].6	74	646	[illegible].[illegible]	30	14	78	3.5	0	115		112			0.16		55
11/[illegible]6	1650			[illegible]7	7.4	83	653	[illegible].1	34	15	73	3.7	0	129		111			0.13		51

* Data [illegible]plied fr[illegible]m U. S. Bureau of Reclamation compiletion. Daylight Saving Time in effect April [illegible]4, 195[illegible], through September [illegible]5, 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %set	Kx10^6	pH	Parts per Million: Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
* SAN JOAQUIN RIVER AT TEMPLE SLOUGH T11S, R13E, Sec. 12A																					
9/26	1030			67			727		31	18	87	5.1	0	120	58	132	0			426	54
10/11	1250			69			665		33	20	69	2.0	0	128	49	114	0			416	48
11/16	0900			49			814		42	20	88	4.7	0	141	71	133	0			456	50
12/16	0910			50			609		31	16	59	2.3	0	191	55	91	0			360	47
* SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE T7S. R9E. Sec. 24G																					
1/25	1330			46			785				97					111				486	54
2/25	1110	59.3		50			1714				230					297				1022	58
3/30	0950			57			2182				276					469				1448	55
4/28	1345	4.60		61			1079				123					193				630	50
5/26	0935			66			1128				133					194				722	51
6/28	1130	58.97		66			1156				131					210				732	49
7/28	1135			73			1233		56	30	141	1.6	0	175	123	217	0		0.3	836	53
8/29	1050			70			1146				126					212				700	48
9/27	1300	58.21		68			1829		78	52	221	4.3	0	191	182	390	0			1158	54
10/12	1005	57.92		63			2301		97	59	281	3.9	0	199	247	501	1.9			1540	56
11/15	1310			50			2074		74	61	225	4.7	0	210	227	401	0			1200	56
12/16	1540			52			2562		87	65	343	4.3	0	207	305	532	3.1			1586	60
* SAN JOAQUIN RIVER ABOVE SALT SLOUGH T7S, R10E, Sec. 26																					
9/27	1230			72			1579		37	34	242	4.3	0	274	83	312	0			934	69
10/12	1035			57			1707		55	25	26	2.0	0	279	105	348	1.2			1000	69
11/16	1325			50			604		25	12	79	4.7	0	163	30	89	0.6			334	60
12/16	1525			51			2009		70	27	313	4.3	0	300	118	430	1.2			1168	70
* SAN JOAQUIN RIVER ABOVE MERCED RIVER T7S, R9E, Sec. 3G																					
1/27	1215			47			1067				128					155				668	52
2/25	1150			52			2091				288					369				1406	60
3/28	1215			65			2448				317					440				1570	56
4/26	1125			60			941				110					153				648	51
5/27	1225			72			1186				139					206				746	51
6/24	1215			72			1160				137					203				710	51
7/29	1315			80			1416				168					258				860	52
8/26	1210			71			1330				158					242				812	52
9/23	1215			68			1913				241					369				1120	55
9/27	1400			69			2043		78	61	253	5.1	0	206	240	426	0			1280	55
10/12	1107			63			2829		110	74	363	3.9	0	214	365	621	0.6			1886	58
11/15	1240			51			2559		91	65	331	4.7	0	224	335	493	1.2			1536	59
12/15	1530			52			3004		102	81	407	4.3	0	215	414	635	4.3			1906	60
* SAN JOAQUIN RIVER AT HILLS FERRY BRIDGE T7S, R9E, Sec. 3H																					
9/27	1330	1.61		69			1073		43	27	126	4.3	0	157	104	187	1.2			658	55
10/12	1113	1.52		64			1246		52	33	154	2.0	0	160	137	237	2.5			800	55
11/15	1230	1.6		52			1562		53	42	202	3.9	0	180	176	281	1.2			928	59
12/15	1520	1.67		53			1416		56	34	178	2.3	0	156	178	257	2.5			878	58
* SAN JOAQUIN RIVER AT CROWS LANDING BRIDGE T6S, R9E, Sec. 7B																					
1/27	1230	44.7		48			755				95					104				472	54
2/25	1210			53			1379				184					233				920	58
3/28	1250	42.7		66			1589				189					289				984	52
4/26	1140			60			671				80					105				418	52
5/27	1240			70			1023				109					170				620	46
6/24	1230	23.8		70			924				112					153				574	53
7/29	1330	42.2		80			1082				126					185				670	51
8/26	1225			72			920				108					149				536	51
9/23	1230	42.3		69			1067				131					186				654	53
10/12	1220	42.0		66			1240				161					231				788	56
11/15	1215	42.1		52			1227				244					213				740	86
12/15	1455	42.25		53			1014				116					161				614	50
* SAN JOAQUIN RIVER AT PATTERSON WATER COMPANY T5S, R8E, Sec. 15M																					
1/27	1300	38.5		50			786				97					110				490	54
2/25	1225			53			1442				193					237				968	58
3/28	1305	36.0		66			1315				155					224				790	51
4/26	1155			60			733				84					112				446	50
5/27	1250			70			1039				133					187				662	56
6/24	1250	36.1		70			902				112					157				558	54
7/29	1345			80			1057				115					189				660	47
8/26	1240			72			1067				127					176				648	52
9/23	1250	36.4		70			1148				135					203				666	51
9/26	1515	36.2		70			1002		45	25	120	4.3	0	173	93	172	1.2			606	54
10/12	1300	36.0		68			1388		62	34	176	2.0	0	188	149	262	1.2			892	56
11/15	1150	36.0		52			1380		55	31	168	3.9	0	180	141	230	2.5			772	58
12/15	1403	36.2		53			1029		45	25	121	2.3	0	168	110	160	4.3			626	55

* Data copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955, through September 25, 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10^6	pH	Parts per Million Ca	Mg	Na	K	CO_3	NCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
SAN JOAQUIN RIVER NEAR GRAYSON T4S, R7E. Sec. 24																					
1/13	1530		620	45	10.3	85	825	7.7	39	17	104	4.6	0	175		116			0.31		57
2/8	1145		680	52	9.8	88	1180	7.7	53	28	154	3.6	0	200		174			0.45		57
3/7	1330		510	59	11.5	113	1390	8.1	56	35	176	4.0	0	194		218			0.40		57
4/11	1245		500	64	14.5	151	1060	8.4	47	23	133	4.4	0	178		177			0.32		57
5/9	1200		760	68	11.0	120	782	8.2	39	18	95	3.4	0	158	82	114	2.8	0.4	0.22	454	54
6/13	1110		600	72	10.0	114	1060	8.1	52	25	135	4.2	0	190		176			0.38		55
7/15	0730		240	74	7.3	85	1200	7.7	56	32	148	4.2	0	201		191			0.38		54
8/15	1130		260	75	10.5	123	1020	7.7	41	28	124	3.2	0	191		159			0.41		55
9/16	1020		295	67	10.0	108	1130	7.7	53	27	144	3.4	0	199	121	184	1.2	0.4	0.36	656	56
10/15	0950		295	63	9.2	95	1370	7.5	62	32	174	3.6	0	209		234			0.38		57
11/17	1310		290	49	9.5	83	1310	7.3	58	31	165	4.0	0	202		222			0.35		56
12/15	0900		340	50	8.2	72	1150	7.3	54	27	154	3.8	0	184		191			0.30		57
* SAN JOAQUIN RIVER AT LAIRD SLOUGH BRIDGE T4S, R7E, Sec. 25D																					
1/27	1330	29.6		50			798				95					111				502	52
2/25	1305			53			1453				189					242				850	57
3/28	1330	26.9		67			1433				169					243				872	51
4/26	1250			60			745				88					117				448	51
5/27	1325			70			1133				139					196				730	53
6/24	1335	26.9		70			1113				131					185				700	51
7/29	1410			80			1130				126					190				704	48
8/26	1310			72			1091				120					176				654	52
9/23	1330	27.0		70			1110				136					185				656	53
9/26	1450	27.1		71			1178		51	29	144	4.3	0	192	123	202	0			818	56
10/12	1350			69			1378		60	35	168	2.0	0	197	170	243	1.2			866	56
11/15	1110			52			1526		61	38	194	3.9	0	209	173	260	2.5			990	57
12/15	1325	6.85		52			1154		52	28	140	4.3	0	178	134	185	2.5			710	55
* SAN JOAQUIN RIVER AT WEST STANISLAUS IRRIGATION DISTRICT T4S, R7E, Sec. 10																					
9/26	1430	23.0		71			1097		48	28	130	4.3	0	191	111	183	0.6			776	54
10/12	1400			70			1344		51	38	165	2.0	0	180	141	251	1.2			826	55
11/15	1030			53			1793		72	54	200	2.7	0	221	221	315	3.1			1046	52
12/15	1305			52			1383		61	36	165	4.3	0	195	163	240	3.1			850	54
SAN JOAQUIN RIVER AT MAZE ROAD T3S, R7E, Sec. 33																					
1/13	1450		1840	46	9.8	82	548	7.3	28	11	64	3.5	0	110		81			0.07		54
2/11	1430		2160	51	10.1	90	562	7.3	26	13	64	2.2	0	94		86			0.17		53
3/7	1230		1340	56	10.7	101	692	7.7	33	16	79	3.2	0	108		112			0.28		53
4/14	1540			65	12.1	128	1060	8.3	54	25	124	6.0	0	188		213			0.29		52
5/17	1210		520	70	12.6	141	1120	8.4	59	24	130	6.2	0	178	75	216	4.5	0.3	0.27	629	53
6/17	0820		450	70	9.2	102	985	8.0	53	21	107	6.6	0	169		199			0.31		50
7/15	0900		300	75	7.8	91	1010	7.5	54	22	144	6.8	0	189		198			0.30		52
8/19	1130		420	76	10.5	124	1020	7.8	52	24	114	5.0	0	187		191			0.38		52
9/16	1100		490	69	9.0	99	1040	7.7	58	21	116	5.8	0	194	48	187	2.8	0.4	0.28	567	52
10/13	1040		500	65	9.1	96	1120	7.7	56	25	138	5.0	0	185		206			0.36		55
11/17	1350		675	50	7.8	69	912	7.3	45	20	104	6.0	0	148		174			0.18		53
12/15	0940		730	50	8.0	70	687	7.3	35	15	82	3.8	0	108		124			0.14		54
* SAN JOAQUIN RIVER AT EL SOLYO RANCH T3S, R7E. Sec. 29F																					
1/27	1345			50			613				66					97				380	47
2/25	1320			53			708				81					120				462	50
3/28	1345			70			1270				139					226				764	48
4/26	1305			60			775				82					129				454	46
5/27	1345			71			1148				139					235				754	53
6/24	1355			71			1029				107					202				668	45
7/29	1430			80			1008				115					201				622	50
8/26	1325			73			1081				116					210				664	47
9/23	1350			70			1032				122					190				620	51
10/12	1420			70			1136				103					212				728	39
11/15	1015			52			1295				232					249				790	100
12/15	1245			52			693				83					126				420	52
SAN JOAQUIN RIVER NEAR VERNALIS T3S, R6E, Sec. 13																					
1/13	1415		2650	45	10.1	84	435	7.1	24	10	45	3.2	0	103	32	60	3.5	0.4	0.01	251	48
2/11	1500		2460	51	10.0	90	521	7.4	26	13	59	2.5	0	97	51	78	2.0	0.1	0.16	297	51
3/15	1530		2040	56	10.1	96	540	7.7	28	13	58	2.3	0	95	47	87	1.4	0.2	0.17	304	50
4/15	0900		719	60	11.6	116	912	8.2	49	24	99	5.6	0	166	54	168	3.9	0.2	0.25	514	49
5/17	1110		739	70	12.1	135	960	8.4	52	21	104	4.6	0	168	60	179	3.9	0.3	0.21	531	50
6/17	0950		1106	68	9.5	104	741	8.0	25	11	42	2.9	0	94	23	73	1.3	0.1	0.08	246	45
7/15	0845		439	76	10.1	119	907	8.0	53	21	99	5.0	0	178	52	164	0.8	0.4	0.27	512	49
8/19	1030		496	76	12.0	142	970	7.8	51	23	106	4.0	0	184	61	174	3.3	0.2	0.32	543	51
9/16	1145		613	68	10.2	111	930	7.9	49	22	104	5.0	0	185	61	162	4.2	0.2	0.24	531	51
10/13	1200		1040	67	10.8	116	946	7.7	14	43	107	5.4	0	181	63	164	4.6	0.3	0.18	526	51
11/17	1430		1140	51	8.8	79	882	7.3	44	18	92	5.6	0	149	52	154	2.5	0.3	0.16	483	51
12/15	1015		1760	50	8.2	72	516	7.3	28	12	57	3.0	0	97	39	85	2.8	0.3	0.17	298	50
* SAN JOAQUIN RIVER NEAR VERNALIS T3S, R6E, Sec. 13B																					
1/4	1100			48			430		21	10	43	3.4	0	76	33	61	3.2			230	49
2/1	1110			50			539		26	15	53	3.5	0	110	51	8	1.9			330	47
3/2	1150			49			462		23	12	48	2.7	0	92	47	72	1.9		0.18	274	48
3/3	0930			58			965		52	22	97	2.7	0	160	48	183	2.4			572	48
4/25	1420			62																	
4/27	1400			6[illegible]			684		39	15	70	2.7	0	135	46	118	2.5			420	47
5/3	1415			72			1048									206				624	
5/31	1330			66			218		12	5.6	19	1.2	0	44	11	38	0.6			142	43
6/27	1300			76			795		42	20	91	0	0	151	42	144	16			478	48
7/7	1120			72			498													558	
7/25	1320			76			893		47	21	96	2.7	0	163	41	170	1.2			506	50
8/9	0925			70			842		43	21	88	2.7	0	170	47	143	2.5			506	49
8/26	1345			65			908		49	22	102	2.0	0	177	62	164	1.9			562	51
10/31	1400			59			715		41	19	97	2.7	0	134	55	150	1.9			506	51
11/28	0930			51			753		32	15	67	2.3	0	106	44	116	0			382	50
12/27	1030	[illegible].7		52			102		3.[illegible]	2.4	8.3	0	0	24	11	8.2	1.9			114	36

* Data copied from U.S. Bureau of Reclamation Compilation. (Daylight Saving Time in effect April 24, 1955, through September 25, 1955)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10^6	pH	Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
									Parts per Million												
BEAR CREEK NEAR STEVINSON T7S, R10E, Sec. 36																					
1/12	1505			43	11.5	92	397	7.8	23	9.4	45	3.9	0	162		25			0.21		49
2/8	1500			52	11.3	102	498	8.0	32	12	55	3.4	0	184		46			0.05		47
3/10	1330			61	10.9	110	695	8.2	42	16	78	3.9	0	173		89			0.27		49
4/14	0915			60	9.0	90	970	8.0	52	18	120	4.6	0	181		171			0.19		55
5/18	0850			66	7.8	83	898	8.4	51	19	106	4.4	0	204	89	130	1.1	0.4	0.29	521	52
6/16	0820			67	9.1	98	826	8.3	48	17	98	4.2	0	214		122			0.36		52
7/12	1400			83			1060	8.1	38	25	146	5.4	0	207		195			0.18		61
8/15	1330			82	9.4	118	1240	8.0	35	18	196	3.2	0	241		228			0.11		72
9/15	1150			67	10.4	112	1420	7.5	44	18	223	4.0	0	253	76	276	1.1	0.6	0.23	799	72
10/12	1250			63	10.7	110	1710	7.9	45	22	289	3.5	6	342		311			0.16		75
MERCED RIVER AT EXCHEQUER DAM T4S. R15E. Sec. 23																					
1/13	0910		51	44	10.9	89	130	7.1	15	3.9	4.6	1.5	0	58		4.8			0.00		15
2/11	1100		52	48	11.7	100	136	7.3	16	4.5	5.6	1.0	0	63		5.0			0.01		17
3/11	0930		49	50	11.2	99	132	7.3	16	4.2	4.3	1.1	0	60		4.0			0.00		14
4/14	1200		1500	54	11.1	103	70.1	7.2	5.4	3.2	3.2	0.7	0	34		2.8			0.01		20
5/12	1000		522	52	9.7	88	53.7	7.2	3.9	2.7	2.6	0.5	0	28	2.8	0.8	0.1	0.1	0.02	44	21
6/16	1110		1750	55	9.7	91	33.3	6.9	4.5	0.1	2.1	0.6	0	18		1.2			0.02		27
7/12	1130		1740	67	9.3	100	38.8	6.7	3.4	0.6	2.9	0.9	0	9		0.8			0.03		34
8/18	1330		1630	66	8.4	90	28.3	7.0	3.4	0.4	2.5	0.5	0	15		0.0			0.00		34
9/15	1440		59	75	6.5	76	122	7.3	17	3.3	3.4	1.1	0	66	5.8	1.8	0.9	0.2	0.04	77	11
10/12	1440		51	68	7.8	85	204	7.5	27	5.5	5.5	1.9	0	104		5.2			0.02		11
11/17	0855		43	48	9.5	82	207	7.3	29	4.5	6.2	1.9	0	110		7.0			0.02		13
12/14	1500		50	48	10.2	88	181	7.3	24	4.7	5.3	1.6	0	82		4.8			0.02		12
MERCED RIVER NEAR STEVINSON T6S, R9E, Sec. 36																					
1/12	1345		238	48	10.3	89	218	7.3	17	6.0	19	2.7	0	104		9.0			0.15		37
2/8	1410		166	55	10.3	97	279	7.6	21	7.0	29	2.3	0	127		16			0.00		43
3/10	1450		134	64	9.8	101	276	7.8	20	6.8	28	2.5	0	124		16			0.15		43
4/14	1000		124	61	10.0	100	234	7.4	14	8.0	24	1.9	0	110		17			0.12		43
5/18	0930		90	69	9.1	100	285	7.9	20	6.3	30	2.2	0	132	6.5	22	2.8	0.0	0.04	186	45
6/16	0910		78	67	8.2	88	261	7.4	19	7.4	29	1.9	0	112		22			0.03		44
7/12	1300		68	83	8.7	110	300	7.1	17	6.2	36	1.7	0	100		38			0.11		53
8/15	1415		105	79	8.5	104	241	7.4	16	4.9	26	1.8	0	106		18			0.05		48
9/15	1030		125	68	7.9	86	213	7.3	15	5.0	21	1.7	0	96	8.2	14	1.9	0.4	0.04	140	43
10/12	1130		92	64	9.7	101	323	7.3	21	7.4	36	2.5	0	143		23			0.06		48
11/16	1445			50	9.7	86	312	7.3	21	6.9	34	2.6	0	141		22			0.05		47
12/14	1135		116	52	9.1	82	288	7.3	21	6.9	33	3.0	0	132		17			0.01		46
* MERCED RIVER AT MERCED RIVER BRIDGE T7S. R9E. Sec. 3-I																					
1/27	1205			50			222				17					10				152	33
2/25	1140			53			264				26					18				190	43
3/28	1210			65			283				27					23				172	41
4/26	1115			58			256				11.5					10.6				188	20
5/27	1215			70			272				29					26				208	46
6/24	1210			70			304				32					31				204	46
7/29	1305			79			306				32					32				208	45
8/26	1200			70			270				27					22				178	43
9/23	1205			68			308				33					26				206	47
10/12	1320			64			341				34					31				240	43
11/15	1235			53			327				51					23				252	68
12/15	1515			54			291				13					19				194	19
TUOLUMNE RIVER AT LA GRANGE																					
1/13	1035		582	46	11.2	94	55.1	6.7	5.7	1.8	2.3	0.5	0	27		1.2			0.00		18
2/11	1200		1690	46	11.8	99	56.6	7.0	5.3	2.1	2.4	0.5	0	29		1.5			0.00		19
3/11	1050		582	52	11.8	107	51.8	7.2	5.5	2.0	2.4	0.7	0	25		1.0			0.03		19
4/14	1330		44	62	11.2	114	53.?	7.7	2.6	3.2	2.4	0.6	0	27		1.0			0.02		20
5/12	1145		39	68	9.1	99	48.1	7.0	1.6	3.4	2.6	0.7	0	26	3.0	0.5	0.2	0.1	0.00	44	23
6/16	1230		22	70	9.1	101	48.4	7.2	5.3	1.9	2.2	0.5	0	27		0.5			0.00		18
7/12	1000		9	76	8.4	99	45.5	7.1	4.0	1.5	2.8	0.7	0	23		1.2			0.04		27
8/18	1450		23	78	8.5	102	40.3	7.2	3.8	1.3	1.7	0.3	0	21		0.5			0.00		19
9/15	1630		20	72	8.3	95	38.3	7.3	4.5	0.9	1.4	0.5	0	21	0.6	0.0	0.0	0.1	0.00	25	16
10/12	1600		23	68	8.4	92	49.4	7.5	3.8	1.9	1.8	0.6	0	24		0.8			0.00		18
11/17	1015			54	9.2	85	27.1	6.9	3.0	0.5	1.8	0.5	0	16		1.0			0.00		26
12/14	1615		587	49	10.3	90	50.7	6.9	4.9	1.3	2.2	0.8	0	22		1.0			0.07		20
TUOLUMNE RIVER AT TUOLUMNE CITY T4S. R8E Sec. 12																					
1/13	1610		998	47	8.4	71	334	7.0	21	6.0	32	3.1	0	64		63			0.19		46
2/8	1310		1160	52	10.0	91	331	7.2	20	6.8	32	2.3	0	66		62			0.03		46
3/11	1320		731	61	9.2	93	359	7.2	22	6.3	36	2.9	0	67		72			0.07		48
4/14	1630		307	68	8.7	95	889	7.6	49	17	95	7.4	0	152		195			0.10		51
5/12	1510		238	78	8.8	106	863	7.9	47	16	95	7.8	0	142	8.1	186	2.5	0.3	0.12	490	52
6/17	0730		262	69	5.9	65	757	7.4	42	15	80	6.6	0	155		151			0.15		50
7/15	0800		218	74	4.7	55	758	7.3	45	14	80	6.3	0	157		150			0.12		49
8/15	1205		233	76	9.4	111	742	7.6	44	14	72	5.4	0	159		146			0.12		47
9/16	0945		233	67	3.9	42	786	7.3	45	15	85	5.8	0	173	9.0	151	1.0	0.2	0.12	441	50
10/13	0900		257	62	4.3	44	786	6.3	47	14	86	5.9	0	162		155			0.12		50
11/17	1230			51	6.5	58	572	7.1	34	10	60	6.1	0	102		121			0.04		49
12/15	0825		535	51	7.5	67	366	7.0	23	7.2	39	3.4	0	66		74			0.00		48

* Data copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955, through September 25, 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10⁶	pH	Parts per Million: Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	P	B	Total Solids	% Na
* TUOLUMNE RIVER AT TUOLUMNE RIVER BRIDGE T4S. R9E, Sec. 7B																					
1/27	1320	9.4		50			344				28					65				206	35
2/25	1255			52			296				26					60				182	39
3/28	1325	8.5		68			877				86					191				520	43
4/26	1240			53			852				92					189				534	47
5/27	1315			72			10				104					216				632	50
6/24	1300	11.1		72			772				77					161				492	43
7/26	1400			7			738				73					153				464	42
8/27	1300			80			789				80					160				482	44
9/23	1315	7.2		77			763				74					149				460	42
10/12	1335			6			764				75					153				504	43
11/15	1100			55			947				165					208				560	76
12/1	1335	9.0		53			364				50					76				230	59
TUOLUMNE RIVER AT HICKMAN T3S, R11E, Sec. 34																					
1/13	1130		665	47	10.4	88	136	6.9	11	2.8	11	1.3	0	32		20			0.00		37
2/11	1245		2,800	48	12.0	103	93.1	7.2	7.5	2.8	5.8	0.6	0	37		7.8			0.00		28
3/10	1000		464	54	13.0	120	120	7.2	3.8	3.9	9.4	1.3	0	39		15			0.02		34
4/14	1415		110	64	11.5	125	52	8.2	27	12	52	4.9	0	104		108			0.06		48
5/12	1330		125	77	11.4	136	501	8.4	29	9.6	51	4.9	0	104	3.0	100	0.6	0.2	0.10	289	48
6/16	1330		86	75	11.2	128	509	.4	30	11	53	5.2	0	106		104			0.12		48
7/12	0930		81	75	7.5	100	613	8.1	32	12	65	6.8	0	110		132			0.16		51
8/18	1600		88	78	9.5	114	570	8.0	30	11	59	5.8	0	110		115			0.07		50
9/15	1745		90	71	9.2	103	567	7.9	32	11	57	5.9	0	107	3.6	118	0.7	0.1	0.13	336	49
10/12	1715		104	67	10.6	114	553	7.7	30	12	61	5.6	0	109		111			0.08		50
11/17	1115			53	9.1	83	123	7.1	7.6	2.4	11	1.3	0	32		19			0.00		44
12/15	1340		690	50	9.7	86	119	7.1	8.7	3.0	8.9	1.4	0	35		15			0.00		35
* STANISLAUS RIVER AT BRET HARTE PUMPS T3S. R7E, Sec. 9P																					
1/27	1400	21.0		51			226				10					4.6				154	19
2/25	1100			48			99				4.4					18				98	19
3/28	1120			64			201				14					12				180	22
4/26	1320			59			165				7.1					6.4				116	19
5/27	1410			67			84				2.3					2.1				64	12
6/24	1430			70			205				11					6.7				158	23
7/29	1150			74			262				17					11				188	28
8/26	1340			72			267				15					74				184	24
9/23	1420			70			285				17					12				192	26
10/12	1445			69			300				17					11				218	25
11/15	0955			52			260				19					11				172	32
12/15	1155			50			175				5.1					6.4				116	13
STANISLAUS RIVER AT MOUTH T3S. R7E. Sec. 11																					
1/13	1340		686	43	11.2	90	170	6.9	17	6.6	6.6	1.7	0	75		4.2			0.02		17
2/21	1200		850	51	11.2	100	118	.3	12	4.6	4.6	1.1	0	59		2.0			0.05		17
3/15	1630		968	56	9.9	94	112	7.4	11	4.0	4.4	1.1	0	54		2.0			0.00		17
4/15	0940		82	61	10.0	100	262	7.6	22	11	15	2.5	0	144		8.1			0.04		24
5/18	1140		83	74	10.0	116	217	7.8	25	8.9	14	2.5	0	133	9.2	9.5	1.6	0.0	0.00	168	23
6/17	0920		593	67	8.4	91	94.6	7.2	9.3	3.8	4.2	1.1	0	54		1.5			0.06		18
7/15	0930		43	75	9.2	108	271	7.3	26	10	17	2.8	0	144		9.2			0.01		25
8/19	0945		28	73	8.2	94	281	7.4	26	10	16	2.3	0	153		7.5			0.00		24
9/16	1300		41	71	8.4	94	272	7.5	25	10	16	2.3	0	149	9.0	8.2	1.6	0.1	0.03	181	25
10/13	1310		115	68	8.3	90	283	7.3	25	12	16	2.7	0	155		8.0			0.00		23
11/17	1530		174	50	9.2	81	255	7.3	23	9.8	14	3.0	0	134		8.0			0.00		23
12/15	1115		488	49	9.9	86	169	7.3	18	5.9	8.1	1.9	0	84		4.8			0.00		20
* SALT SLOUGH AT SAN LUIS RANCH T9S. R11E. Sec. 7A																					
1/25	1420			46			1916				220					166				1262	50
2/25	1010	4.56		50			2428				345					419				1682	62
3/30	1040			57			1574				146					291				998	40
4/28	1300	4.62		63			1174				133					203				714	49
5/25	0950	3.80		66			916				102					154				596	48
6/29	1300	3.08					759				76					119				514	43
7/28	1250			76			822		41	21	96	1.6	0	161	74	129	5.5		0.3	504	52
8/30	0900			69			857				94					140				514	48
9/26	1405	4.62		66			1043		43	32	117	5.1	0	176	96	178	1.9			626	51
10/11	1110			68			1191		53	34	142	3.9	0	192	111	227	2.5			728	53
11/16	1020			49			1963		66	51	248	4.7	0	233	243	359	4.3			1152	59
12/16	1350	5.35		52			1735		70	43	221	4.3	0	197	223	318	1.9			1082	57
SAN JOAQUIN RIVER AT MOSSDALE BRIDGE																					
1/19	1350			46	10.2	85	377	7.1	22	7.7	40	4.2	0	89		50			0.28		49
2/21	1010			49	11.0	96	501	7.4	28	12	54	2.2	0	91		71			0.19		49
3/15	1420			57	10.0	8	629	7.7	22	21	70	2.5	0	104		106			0.10		51
4/15	1140			62	10.6	108	954	8.4	53	21	109	5.8	0	176		180			0.22		51
5/17	0750			67	12.0	130	960	8.4	54	20	107	5.6	0	170	60	178	0.6	0.2	0.22	534	51
6/21	0910			70	11.4	127	692	8.4	38	17	72	3.6	0	139		121			0.15		48
7/18	1515			76	9.0	94	1000	8.0	22	44	106	6.0	0	178		196			0.37		49
8/22	1430			78	8.1	100	959	7.8	21	23	104	5.0	0	190		175			0.35		50
9/21	1610			72	13.1	166	912	8.1	56	16	102	4.2	0	181	59	159	1.1	0.3	0.26	515	51
10/19	1015			63	10.6	109	827	7.9	45	13	92	4.0	0	160		141			0.24		51
11/22	1135			52	9.6	97	696	7.5	37	15	79	3.5	0	123		120			0.14		52
12/20	1430			54	9.4	97	497	7.3	20	11	53	2.7	0	99		84			0.14		50

* Data copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955, through September [illegible], 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10^6	pH	Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
									Parts per Million												
* SAN JOAQUIN RIVER AT MOSSDALE BRIDGE T2S. R6E, Sec. 3																					
1/4	1030			48			339				32					53				234	41
2/1	1025			51			508				62					91				368	45
2/1	1600			46			580				62					100				374	47
3/31	1400			61			1021				103					200				634	44
4/27	1430			60			626				64					107				382	44
6/1	1130			62			190				22					36				134	51
6/29	1020			70			835				86					158				528	45
7/27	1515			78			942				94					181				630	43
9/1	0930	2.40		74			857				90					155				514	42
10/3	1005			69			1038				120					192				646	50
10/25	1350			64			815				91					148				494	49
12/2	1010			55			697				110					125				410	69
12/27	1010	20.3		52			75				4.6					6.7				88	27
* SAN JOAQUIN RIVER AT BRANDT BRIDGE T1S, R6E, Sec. 9L																					
3/1	1530			47			532				56					91				334	46
6/1	1115			65			221				20					35				142	39
9/1	1040	5.10		76			630				69					95				378	48
12/2	1030			54			682				106					119				412	68
SAN JOAQUIN RIVER AT GARWOOD BRIDGE																					
1/19	1300			46	9.8	81	234	7.1	15	5.4	23	4.7	0	66		26			0.07		43
2/15	1420			54	9.1	84	529	7.4	28	13	58	2.5	0	102		73			0.17		50
3/15	1330			57	9.9	95	546	7.4	24	16	59	2.7	0	101		86			0.14		50
4/21	0910			59	8.1	80	611	7.6	34	15	65	5.6	0	159		90			0.22		48
5/19	1520			72	5.3	60	763	7.8	42	20	82	4.8	0	174	42	125	3.6	0.2	0.22	427	47
6/23	0845			71	5.6	63	442	7.4	25	12	47	3.1	0	106		70			0.21		47
7/18	1430			76	8.8	104	575	7.3	18	21	63	5.1	0	131		85			0.16		50
9/25	0900			75	1.6	19	612	7.3	31	14	60	4.9	0	182		90			0.14		48
9/21	1100			72	3.2	35	745	7.5	46	12	84	5.9	0	166	23	132	4.3	0.5	0.27	397	52
10/17	1605			66	3.6	38	1020	7.5	54	22	119	6.2	0	199		179			0.30		52
11/21	1550			51	9.4	84	1000	7.5	52	22	114	5.6	0	170		182			0.19		52
12/19	1535			52	9.3	84	548	7.3	30	12	61	3.5	0	105		92			0.06		51
STOCKTON SHIP CHANNEL NEAR RINDGE PUMP																					
1/19	0900			43	10.0	79	316	6.9	20	9.0	27	3.1	0	77	26	38	4.8	0.4	0.00	186	39
2/15	1630			52	7.3	66	609	7.2	34	15	66	3.1	0	124	53	90	3.4	0.2	0.17	347	49
3/17	1300			57	8.5	82	619	7.3	33	15	66	3.0	0	106	61	97	3.1	0.2	0.27	349	49
4/21	1250			59	10.7	105	553	8.1	31	14	57	3.1	0	112	43	85	1.9	0.2	0.20	302	47
5/19	1630			72	11.7	132	515	8.4	30	13	53	3.5	0	122	34	80	0.7	0.3	0.19	281	46
6/23	0950			71	8.4	95	386	7.8	22	11	38	2.5	0	96	24	58	0.9	0.2	0.11	212	45
8/25	1115			77	6.6	79	383	7.3	20	11	38	2.2	0	101	21	55	1.2	0.2	0.16	216	45
9/21	0910			69	6.0	66	449	7.3	23	13	45	2.8	0	110	25	68	1.0	0.3	0.15	249	46
10/18	1010			64	5.6	59	537	7.3	20	19	56	3.6	0	131	30	80	1.9	0.5	0.16	289	48
11/21	1430			53	9.8	90	746	7.7	38	19	80	4.6	0	152	46	130	3.1	0.4	0.17	408	49
12/20	1000			52	8.3	75	808	7.1	50	21	82	4.6	0	105	98	129	14	0.5	0.31	473	45
* SAN JOAQUIN RIVER AT SAN ANDREAS LANDING T3N, R3E, Sec. 13																					
1/31	1340			47			308		19	13	21	2.0	0	68	32	33	4.3			206	31
3/1	0940			49			342		21	13	28	2.7	0	83	31	49	1.2			224	36
4/1	1210	5.8		57			225		15	8.7	14	1.2	0	76	17	20	0			158	29
4/27	1005			55			172		9.3	9.0	9.9	1.6	0	68	8.6	16	0.56			132	25
6/2	1330			70			142		10	6.2	9.2	0	0	52	11	10	0			120	28
6/29	1420			69			198		10	9.3	14	1.2	0	71	12	20	0			128	33
7/8	1130			70			213													146	
7/27	1155			72			252		14	8.7	22	1.6	0	82	15	26	0			160	40
8/31	1204			71			240		16	8.2	18	1.2	0	96	13	17	0.6			204	34
9/28	1020			66			259		19	13	18	1.2	0	92	11	18	0			230	32
10/25	1132			63			230		16	8.7	15	2.0	0	86	9.1	21	0.6			150	30
11/30	1105			50			196		13	7.8	12	1.2	0	48	14	12	0			124	28
12/28	1115			50			70		5.6	3.9	3.0	0	0	22	8.6	3.2	1.9			96	18
* SAN JOAQUIN RIVER AT TWITCHELL ISLAND T3N, R3E, Sec. 17																					
4/27	0925			55			190													134	
6/2	1300			74			159													148	
6/29	1345			69			200													168	
7/27	1140			72			388													236	
8/31	1145			70			533													358	
9/28	0950			66			340													208	
10/25	1115			63			232													152	
* SAN JOAQUIN RIVER AT JERSEY POINT																					
5/2	1015			58			192													136	
5/31	1135						179													126	
6/27	1135			68			248													190	
7/25	1045			69			1290													762	
8/29	1100			68			941													560	
9/26	1330			66			563													306	
10/31	1245			62			300													174	

* Date copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955, through September 25, 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10⁶	pH	Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
									Parts per Million												
SAN JOAQUIN RIVER AT ANTIOCH T2N, R2E, Sec. 12																					
1/21	1010		44	10.2	82	418	7.3	26	13	35	2.0	0	83	45	54	5.3	0.3	0.00	245	39
2/1[illegible]	1100		50	.3	82	401	7.2	24	13	36	2.5	0	88	42	50	3.3	0.3	0.11	234	40
3/16	1520		59	10.9	107	381	7.8	22	12	33	2.1	0	89	35	47	2.3	0.2	0.14	219	40
4/29	1430		58	9.7	94	955	7.4	22	23	126	6.2	0	88	48	218	1.8	0.3	0.17	506	63
5/19	0840		69	8.8	97	192	7.9	13	7.2	15	1.5	0	69	14	16	0.6	0.0	0.18	121	34
6/22	1030		69	9.3	102	1270	7.8	18	26	184	8.0	0	69	59	314	2.7	0.2	0.31	662	70
7/20	1200		71	8.9	100	2550	7.8	31	52	398	17	0	79	195	625	2.0	0.2	0.30	1370	73
8/24	1230		72	.3	94	6530	7.5	61	138	1040	42	0	94	294	1950	2.3	0.3	0.53	3580	75
9/22	1350		68	7.7	84	2730	7.7	33	54	405	17	0	104	114	720	1.2	0.3	0.24	1410	73
10/20	[illegible]815		61	7.6	77	1020	7.3	18	26	138	72	0	116	43	228	2.6	0.3	0.08	607	65
11/23	1110		51	8.6	77	991	7.3	20	24	135	6.8	0	99	45	229	2.8	0.4	0.08	535	65
12/21	1440		52	9.5	96	375	7.3	16	11	42	2.9	0	80	23	61	1.3	0.5	0.18	218	50
* SAN JOAQUIN RIVER AT ANTIOCH T2N, R2E, Sec. 18																					
1/4	1015		44			352					27					48				226	33
1/31	1020		49			366					26					46				232	31
3/1	1235		51			416					62					65				288	65
3/30	1135		57			1097					139					251				624	55
5/2	1010		58			241					18					29				154	32
[illegible]/31	1215		67			240					21					32				150	38
6/27	1125		68			880					117					213				560	58
7/25	1135		68			4732					738					1406				2930	68
8/2[illegible]	1110		69			3429					481					958				2054	61
9/26	1105		67			1372					175					359				752	55
10/31	1035		62			1115					168					296				686	66
11/28	1[illegible]0		55			486					90					79				300	81
12/27	13[illegible]5	5.8	52			241					20					30				166	36
OLD RIVER AT SOUTHERN TIP OF FABIAN TRACT NEAR TRACY																					
1/20	0825		45	8.6	72	406	7.2	23	9.0	45	3.9	0	93		53			0.07			50
2/21	1055		50	9.1	80	641	7.4	33	16	71	3.0	0	107		95			0.27			50
3/15	1730		55	9.9	92	576	7.7	22	19	64	1.7	0	95		92			0.27			51
4/15	1100		61	9.8	99	1060	8.2	58	25	116	5.0	0	172		209			0.26			50
5/17	0900		66	7.1	76	875	8.3	50	20	93	4.0	0	169	65	150	3.7	0.3	0.21	487	49
6/21	1020		69	6.1	67	457	7.4	25	12	42	2.6	0	94		76			0.13			44
7/19	0730		70	7.0	78	1040	7.6	49	31	112	5.0	0	167		178			0.63			49
[illegible]/24	1500		77	8.1	97	945	7.6	44	26	99	5.6	0	190		170			0.08			49
9/21	1500		71	6.5	72	985	7.7	56	22	106	5.4	0	199	61	174	2.5	0.3	0.30	549	50
10/1[illegible]	1440		64			1050	7.9	59	24	120	6.4	0	205		181			0.35			51
11/22	1[illegible]45		50	5.5	48	956	7.3	54	21	106	6.4	0	182		170			0.27			50
12/20	1330		54	7.2	67	592	7.3	34	14	64	4.3	0	121		96			0.24			49
DELTA-MENDOTA CANAL NEAR TRACY T1S, R4E, Sec. 31																					
1/20	0910		44	9.7	79	717	7.3	33	16	89	3.8	0	118		119			0.34			56
2/21	1430		56	10.2	97	651	7.6	33	16	74	2.8	0	107		98			0.31			52
3/7	1030	860	55	13.1	123	656	8.2	29	17	72	2.3	0	105		104			0.21			52
4/11	1100	2574	62	8.9	91	370	7.6	22	13	36	2.3	0	90		51			0.15			41
5/9	1015	1730	64	8.1		360	7.4	21	11	31	1.8	0	89	31	46	1.4	0.3	0.14	208	40
6/13	0950	3300	68	8.1	88	222	7.6	14	7.3	20	1.5	0	54		29			0.07			39
7/19	0800	3406	71	7.1	80	298	7.0	14	10	26	2.1	0	73		30			0.18			42
8/23	0900	2490	76	6.8	80	583	7.3	26	15	63	3.4	0	114		104			0.00			51
9/22	0740	1660	67	6.3	68	765	7.5	36	19	90	4.0	0	140	50	138	2.8	0.5	0.24	429	53
10/19	1145	865	64	9.2	96	1010	7.9	52	23	117	4.6	0	186		177			0.33			52
11/22	1315		52	10.0	90	1030	7.7	54	23	119	5.2	0	171		188			0.22			52
12/20	1520		54	9.9	92	731	7.5	35	16	88	3.6	0	123		127			0.33			55
OLD RIVER AT CLIFTON COURT FERRY																					
1/20	9040		45	9.4	78	383	7.3	22	9.5	43	3.8	0	85	37	56	3.5	0.7	0.07	240	49
2/21	1515		50	9.7	86	602	7.4	31	14	67	2.6	0	102	68	88	2.0	0.1	0.22	340	51
3/16	0900		55	9.1	85	598	7.4	31	14	66	2.5	0	97	60	96	1.3	0.2	0.28	335	51
4/20	0920		58	8.5	83	370	7.2	23	11	33	2.9	0	90	35	46	1.6	0.3	0.14	216	40
5/18	1300		69	7.5	82	398	7.6	25	13	36	2.2	0	94	37	56	1.2	0.2	0.15	235	40
6/21	1030		71	7.4	83	267	7.4	16	8.8	23	1.7	0	76	22	30	0.8	0.2	0.11	154	39
7/19	0830		72	7.0	80	289	7.2	16	8.8	25	2.1	0	78	26	30	0.7	0.2	0.12	164	41
8/23	1000		75	6.8	80	590	7.3	20	14	62	3.3	0	92	32	100	0.9	0.2	0.19	297	55
9/22	0830		68	6.2	68	616	7.3	28	14	67	3.6	0	118	35	110	0.5	0.3	0.08	339	52
10/19	1235		64	7.1	74	595	7.5	18	22	65	3.2	0	131	35	95	0.9	0.3	0.07	327	50
11/22	1350		50	9.6	85	1020	7.6	52	23	116	5.0	0	167	79	188	4.7	0.4	0.25	581	52
12/21	0850		52	8.3	75	567	7.3	31	13	60	3.3	0	104	48	94	3.0	0.3	0.15	326	49
* OLD RIVER AT CLIFTON COURT FERRY T1S, R4E, Sec. 21																					
1/4	[illegible]40		45			617					65					107				394	46
2/1	1030		48			650					68					95				400	46
3/1	0930		45			560					58					95				356	45
3/31	1330		50			615					58					91				398	41
4/27	1315		58			391					32					55				254	36
6/1	0920		65			300					25					43				184	36
6/27	1415		71			256					21					31				204	36
7 2	1000		74			314					28					40				226	39
[illegible]/1	1115	[illegible]	74			560					59					106				328	46
10/3	1 [illegible]0		69			515					58					89				300	49
10/31	13[illegible]		62			802					89					153				478	48
11/3[illegible]	1415		52			721					114					123				440	50

* Data copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955, through September [illegible], 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10^6	pH	Parts per Million: Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
ITALIAN SLOUGH NEAR MOUTH																					
1/20	1030			46	8.5	71	701	6.8	42	16	69	4.4	0	75		103			0.44		46
2/21	1545			51	9.5	85	680	7.3	34	17	77	2.9	0	106		104			0.30		52
3/16	0940			57	9.3	90	629	7.4	32	15	69	2.7	0	96		106			0.37		51
4/20	1000			58	9.1	88	383	7.2	25	12	33	2.0	0	84		46			0.09		39
5/18	1400			72	8.2	94	338	7.4	22	9.8	30	2.1	0	86	33	41	1.0	0.3	0.10	198	40
6/21	1140			76	8.1	95	253	7.4	16	8.0	22	1.7	0	76		27			0.08		39
7/19	0930			73	7.2	83	275	7.3	14	10	25	1.8	0	78		30			0.15		41
8/23	1050			77	6.6	79	556	7.0	20	14	64	3.3	0	93		105			0.28		55
9/22	0915			68	6.5	71	526	7.3	22	12	60	3.2	0	98	29	95	0.6	0.4	0.01	289	54
10/17	1325			62	6.7	68	447	7.3	20	13	48	2.7	0	112		67			0.23		49
11/22	1445			50	10.1	89	965	7.5	51	22	109	4.4	0	151		175			0.25		52
12/21	0945			53	8.4	77	657	7.1	36	16	75	3.5	0	91		109			0.42		51
INDIAN SLOUGH NEAR BRENTWOOD																					
1/20	1415			48	9.5	81	1180	7.9	69	34	131	3.6	0	259		176			1.7		47
2/16	1440			53	16.1	149	1430	8.1	61	41	176	4.2	0	196		237			1.6		54
3/16	1130			53	10.5	98	1110	8.0	9.7	72	114	2.6	0	292		150			1.5		43
4/20	1045			58	7.5	73	396	7.3	22	12	39	2.0	0	92		52			0.24		44
5/18	1515			78	8.3	100	398	7.9	21	13	39	2.3	0	101	38	50	0.9	0.3	0.27	231	44
6/21	1320			77	7.5	89	240	7.4	13	8.9	20	1.4	0	77		24			0.11		38
7/19	1000			77	6.9	82	309	7.0	6.4	16	30	2.5	0	81		36			0.26		44
8/23	1210			80	7.2	89	708	7.3	23	17	86	3.8	0	104		140			0.36		58
9/22	1010			67	7.4	80	783	7.3	27	21	91	4.0	0	124	54	146	3.7	0.4	0.51	427	56
10/19	1410			62	7.6	77	755	7.3	29	21	92	3.0	0	148		126			0.75		55
11/23	0840			49	9.7	85	1140	7.5	71	36	120	2.4	0	312		148			2.0		44
12/21	1040			57	9.0	86	1110	7.5	75	36	111	2.8	0	309		143			1.8		42
OLD RIVER AT ORWOOD BRIDGE																					
1/20	1500			45	9.2	76	682	7.3	39	18	67	3.5	0	100	92	96	7.7	0.3	0.13	398	45
2/16	1400			52	8.4	76	759		41	19	83	3.3	0	125	84	117	3.4	0.3	0.28	436	50
3/16	1230			57	9.7	93	663	7.6	34	17	73	2.9	0	98	80	102	2.4	0.3	0.33	378	50
4/20	1200			57	8.9	85	312	7.3	19	10	27	2.1	0	88	27	34	1.1	0.3	0.13	183	39
5/19	1110			68	8.2	89	272	7.3	19	8.9	22	1.8	0	80	22	30	1.0	0.2	0.10	164	36
6/22	0840			70	7.0	78	269	7.2	17	9.1	23	1.7	0	78	19	32	0.7	0.3	0.08	153	38
7/19	1030			75	6.8	80	266	7.3	15	8.4	25	2.1	0	81	19	31	0.6	0.2	0.14	153	42
8/24	1010			75	6.8	80	680	7.3	21	16	81	3.8	0	92	38	136	0.8	0.2	0.13	360	59
9/22	1125			69	6.5	71	536	7.4	17	15	61	3.3	0	100	29	98	0.4	0.3	0.03	292	55
10/19	1500			62	6.8	69	426	7.3	16	15	45	2.8	0	112	23	60	0.8	0.3	0.03	240	48
11/25	1010			48	9.4	81	848	7.3	42	21	95	3.8	0	142	67	152	1.6	0.3	0.20	479	51
12/20	1145			51	9.6	86	694	7.3	39	17	73	3.9	0	107	73	114	5.1	0.5	0.34	400	48
ROCK SLOUGH NEAR KNIGHTSEN																					
1/20	1550			45	10.0	82	861	7.3	46	25	89	3.2	0	110		129			0.35		47
2/16	1220			51	8.4	75	846	7.2	41	24	91	3.4	0	128		129			0.46		49
3/16	1400			55	9.9	93	746	7.6	35	20	80	3.0	0	114		116			0.39		50
4/20	1330			58	8.5	82	320	7.2	20	10	27	2.0	0	92		35			0.16		38
5/19	0950			70	5.9	66	277	7.2	20	7.8	24	2.5	0	84	24	28	0.7	0.3	0.10	165	38
6/22	0920			71	7.0	79	211	7.2	15	7.2	17	1.5	0	36		18			0.09		35
7/19	1115			75	6.1	72	273	7.0	15	9.1	28	2.6	0	78		30			0.09		44
8/24	1120			73	6.3	72	723	7.3	20	17	91	4.2	0	94		152			0.30		61
9/22	1225			69	5.7	63	579	7.3	20	15	68	3.7	0	101	29	109	0.3	0.2	0.08	314	56
10/19	1615			63	6.9	70	414	7.3	19	13	45	2.8	0	114		58			0.22		48
11/23	0945			48	8.5	73	496	7.1	25	14	54	3.0	0	118		71			0.27		48
12/21	1300			54	9.5	88	696	7.3	36	18	76	3.7	0	122		113			0.37		50
* **CONTRA COSTA CANAL AT FIRST PUMP LIFT** T2N, R2E, Sec. 25																					
1/4	0945			43			930		45	25	95	3.4	0	120	120	140	5.1			540	48
1/31	1000			46			997		43	34	112	3.5	0	123	154	151	7.4			632	49
3/1	1300			49			865		38	28	99	2.7	0	129	113	144	4.3		0.60	550	50
3/30	1110			58			644		31	19	63	1.2	0	99	80	92	1.9			392	46
5/2	1045			60			387		19	14	35	2.7	0	87	43	46	0.62			248	42
5/31	1240			70			308		16	12	24	1.2	0	68	34	38	1.2			214	37
6/27	1200			70			331		14	13	30	1.6	0	71	39	41	0			210	41
7/7	1235			72			296													196	
7/25	1200			76			392		17	13	39	1.6	0	82	34	58	0		0.1	236	47
8/29	1030			72			771		24	18	95	2.7	0	92	45	158	0		0	452	60
9/26	1035			68			670		20	20	74	1.6	0	101	42	117	0			382	55
10/31	1005			60			502		22	17	48	2.0	0	117	40	72	0.6			316	46
11/28	0930			55			627		28	19	63	2.3	0	118	62	86	0		0.11	382	48
12/27	1340			52			674		33	21	58	1.6	0	90	101	81	1.9			418	42
* **OLD RIVER AT HOLLAND TRACT** T2N, R4E, Sec. 19																					
1/5	0945			43			728				68					111				514	41
2/1	1305			46			598				48					82				374	35
3/2	1030			50			568				53					89				382	40
3/30	1045			56			376				29					47				244	34
5/2	0932	2.73.		58			252				18					27				172	31
5/31	0940						196				14					38				144	31
6/27	0930			69			197				17					20				154	38
7/7	1325			72			232													154	
7/25	1215			72			389				40					62				240	45
8/29	1035			70			716				84					150				420	51
9/26	1245			68			495				51					96				306	45
10/31	0930			61			361				31					46				224	37
11/28	1235			52			426				58					53				252	59
12/27	1420			52			269				23					35				178	37

* Date copied from U. S. Bureau of Reclamation compilation. (Daylight Saving Time in effect April 24, 1955, through September 25, 1955.)

TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10⁶	pH	Parts per Million Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
LD RIVER AT MANDEVILLE																					
1/19	1520			43	10.8	87	495	7.2	32	14	44	2.9	0	83	56	71	.0	0.5	0.12	292	40
2/16	1600			50	8.6	76	495	7.2	31	15	45	2.7	0	98	61	66	4.6	0.4	0.10	294	41
3/17	1130			54	9.6	89	353	7.4	22	11	31	1.6	0	86	32	43	1.9	0.2	0.15	205	40
4/21	1020			56	9.0	85	241	7.3	16	8.0	20	1.7	0	82	17	23	0.9	0.2	0.14	146	37
5/19	1250			68	8.8	96	190	7.4	13	6.7	14	1.4	0	69	14	17	0.6	0.3	0.06	118	33
6/22	1350			69	8.6	94	183	7.4	12	6.6	15	1.3	0	69	13	15	0.5	0.2	0.03	113	35
7/19	1315			75	8.2	96	297	7.3	15	6.9	32	2.1	0	83	18	38	0.5	0.0	0.07	172	50
8/24	0800			72	7.7	88	451	7.4	19	15	82	4.0	0	93	32	130	0.6	0.2	0.22	348	61
9/21	1320			69	6.1	67	446	7.4	17	14	43	2.9	0	109	24	70	0.6	0.3	0.13	252	50
10/18	1215			62	7.5	76	350	7.3	16	13	34	2.5	0	110	19	42	0.9	0.3	0.09	204	43
11/22	0955			50	9.2	91	356	7.3	21	12	32	2.3	0	104	27	42	2.1	0.5	0.06	212	40
12/20	1135			53	10.1	92	337	7.3	21	11	31	2.6	0	87	28	42	2.3	0.5	0.09	201	40
* DUTCH SLOUGH AT FARRAR PARK BRIDGE T2N, R3E, Sec. 22																					
5/31	1205						205													136	
6/27	1200			70			237													168	
7/7	0950			70			282													184	
7/25	1125			72			749													452	
8/26	1230			70			1112													686	
9/26	1540			67			711													384	
10/31	0950						335													226	
11/28	1300			51			347													230	
* FALSE RIVER AT WEBB PUMP T3N, R3E. Sec. 36																					
5/31	1045						191													122	
6/27	1045			69			189													182	
7/7	1045			70			232													154	
7/25	0940			70			471													290	
8/29	1140			69			774													506	
9/26	1430			67			465													256	
10/31	1052			61			284													180	
11/28	1330			52			267													178	
LITTLE POTATO SLOUGH NEAR TERMINOUS																					
1/19	1020			43	10.2	81	214	7.0	16	7.3	13	1.6	0	56	13	28	4.2	0.2	0.05	128	28
2/14	1400			50	9.4	83	295	7.2	21	12	19	1.5	0	78	19	38	2.8	0.3	0.03	168	29
3/17	1430			55	9.6	90	233	7.3	17	8.7	15	1.3	0	78	11	26	0.9	0.2	0.07	136	29
4/18	1320			58	8.6	84	186	7.3	15	6.7	12	1.4	0	80	9.2	13	0.9	0.1	0.10	118	28
5/16	1550			65	8.5	90	156	7.3	12	5.4	9.9	1.1	0	58	7.7	14	0.8	0.1	0.08	99	29
6/23	1120			68	8.2	89	231	7.4	14	8.8	18	1.3	0	81	16	21	0.9	0.2	0.07	139	35
7/18	1330			74	6.9	80	288	7.4	19	11	23	1.8	0	97	14	32	0.7	0.0	0.10	172	35
8/25	1230			74	7.0	81	230	7.3	16	8.3	18	1.5	0	102	12	15	0.5	0.1	0.14	144	34
9/21	0800			65	6.1	65	303	7.4	19	12	24	1.8	0	127	15	22	0.6	0.2	0.08	182	35
10/18	0845			60	7.8	78	254	7.3	16	11	18	1.7	0	94	10	25	1.1	0.3	0.03	154	31
11/21	1330			50	8.3	73	252	7.1	18	9.0	17	1.8	0	87	13	26	2.7	0.3	0.00	154	30
12/20	0850			49	10.0	87	244	7.3	17	9.1	17	1.6	0	72	21	24	5.9	0.5	0.05	152	31
KERN RIVER NEAR KERNVILLE																					
9/19	0930						156		14	2.0	15	1.6	0	69	11	4.0	0.4	0.3	0.20	100	42
10/10	1500		130	60	9.2	92	167		14	2.4	17	1.8	0	73		6.9			0.19		43
11/28	1200		204	43	11.0	88	168		15	1.8	17	1.8	0	72		7.5			0.19		44
KERN RIVER AT ISABELLA DAM																					
9/14	1015		138	70	7.0	78	184	7.7	20	2.1	14	2.9	0	99	6.8	2.3	0.2	0.4	0.20	106	33
10/11	0900		18	63	8.1	84	233		24	3.8	18	3.6	0	121		4.7			0.26		33
11/28	1100		15	45	10.6	88	277		29	5.0	24	4.0	0	148		9.0			0.32		35
KERN RIVER AT BAKERSFIELD T29S, R28E, Sec. 2																					
1/11	0755			41	11.5	90	205	7.3	19	2.6	20	1.8	0	86		11			0.29		42
2/10	1230			49	11.5	100	227	7.6	20	3.4	23	2.1	0	100		12			0.15		43
3/9	1300			61	9.7	99	201	7.8	19	2.3	19	1.7	0	88		9.5			0.13		41
4/13	1030			57	11.0	106	199	7.7	9.7	7.9	18	2.1	0	91		8.2			0.16		40
5/11	1130			66	8.6	92	125	7.5	8.8	3.4	12	1.4	0	58	8.7	3.6	0.1	0.3	0.06	93	41
6/15	1015			65	9.4	99	71.5	7.4	7.8	1.1	6.0	0.8	0	35		2.0			0.07		34
7/14	1530			76			100		8.9	1.7	9.0	1.2	0	46		4.5			0.07		39
8/17	1350			79	7.8	95	139	7.4	11	2.3	13	1.6	0	63		6.5			0.04		42
9/14	1330		274	77	7.6	91	200	7.5	18	2.7	17	2.1	0	84	13	11	0.2	0.4	0.18	117	39
10/11	1500		144	68	8.4	92	243	7.7	18	3.3	26	2.3	0	86		15			0.23		48
11/15	1500			49	10.4	91	251	7.7	22	3.4	25	3.2	0	106		14			0.24		43
12/8	1440			48	10.8	93	189	7.7	17	3.6	17	2.3	0	84		7.2			0.20		38
TULE RIVER NEAR PORTERVILLE T21S, R28E, Sec. 25																					
1/11	0935			43	11.9	96	359	7.9	44	7.3	22	4.2	0	198		14			0.22		25
2/10	1100			49	11.7	102	332	8.0	44	6.9	18	2.3	0	194		10			0.09		22
3/9	1030			56	10.3	99	241	8.0	31	4.8	14	2.2	0	138		5.8			0.08		23
4/13	0850			54	13.4	124	239	8.0	34	3.2	12	2.1	0	144		6.2			0.09		21
5/11	0935			60	9.9	99	158	7.9	21	2.6	8.1	1.4	0	94	2.0	3.8	0.4	0.2	0.05	109	21
6/15	0840			64	9.1	95	221	7.9	33	3.3	11	1.8	0	137		4.8			0.19		20
7/14	0745		7	75	7.9	92	366	7.5	49	7.5	20	3.9	9	202		9.5			0.13		22
8/17	1200		1	82	11.7	147	399	7.8	54	9.1	21	3.0	0	213		12			0.19		21
10/11	1259		1	68	11.4	124	421	7.7	52	9.9	26	3.2	3	236		16			0.14		24
11/15	1230			52	10.0	91	465	7.7	59	9.3	30	5.0	12	250		20			0.14		25
12/13	1241		104	48	10.4	90	271	7.5	35	5.8	15	2.5	0	154		9.2			0.07		22

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TABLE 225

COMPLETE OR PARTIAL ANALYSIS OF THE WATERS OF THE SACRAMENTO, SAN JOAQUIN RIVERS, THEIR TRIBUTARIES AND THEIR DELTAS - 1955 (contd.)

Date	Time	G.H. Feet	Flow c.f.s.	Temp °F	Dissolved Oxygen ppm	Dissolved Oxygen %sat	Kx10^6	pH	Parts per Million: Ca	Mg	Na	K	CO_3	HCO_3	SO_4	Cl	NO_3	F	B	Total Solids	% Na
KAWEAH RIVER NEAR THREE RIVERS T17S, R28E, Sec. 33																					
1/11	1110			40	12.2	94	134	7.3	17	1.7	7.2	1.1	0	68		5.8			0.13		24
2/10	0910			42	12.0	95	116	7.2	15	1.5	6.4	1.1	0	60		4.0			0.01		24
3/9	0900			51	10.6	97	96.4	7.3	11	1.6	5.0	1.2	0	48		2.0			0.06		23
4/12	1540			59	11.5	113	58.3	7.3	3.8	2.7	3.3	0.8	0	32		1.6			0.00		25
5/11	0750			54	9.9	92	41.0	7.2	4.2	1.3	2.4	0.7	0	24	1.2	0.3	0.1	0.3	0.01	36	24
6/14	1645			58	9.5	92	35.8	7.2	4.7	0.8	1.8	0.4	0	22		0.5			0.00		20
7/13	1700		201	82	8.0	102	85.2	7.1	8.9	1.2	5.5	2.2	0	36		3.8			0.00		29
8/17	0945		50	72	9.3	106	109	7.5	13	1.8	5.7	1.4	0	55		5.5			0.06		23
9/13	1600		26	78	8.1	98	134	7.9	16	1.5	7.7	1.7	0	63	3.0	8.5	0.2	0.1	0.02	86	26
10/11	1100		24	60	9.1	91	152	7.5	17	2.5	8.8	1.8	0	71		10			0.03		26
11/15	1100		71	46	10.2	85	164	7.5	19	2.4	8.9	1.9	0	80		9.0			0.01		24
12/13	1100		247	46	10.4	87	95.9	7.3	12	1.4	5.4	1.2	0	48		4.0			0.03		24
KINGS RIVER ABOVE NORTH FORK T12S, R26E, Sec. 27																					
1/11	1505		262	39	12.0	91	62.3	6.9	7.7	0.3	4.2	0.6	0	27		3.0			0.22		30
2/9	1520		296	47	11.4	97	62.0	7.1	7.3	0.4	4.3	0.6	0	27		2.5			0.01		31
3/8	1345		538	50	10.4	92	57.8	7.2	7.2	1.0	3.9	0.8	0	25		1.5			0.00		27
4/12	1220		1100	51	11.4	101	36.1	7.1	1.8	1.4	2.9	0.6	0	16		1.5			0.00		37
5/10	1245		2160	56	10.0	95	30.6	7.2	3.6	0.2	2.2	0.5	0	16	1.7	1.0	0.2	0.2	0.03	28	31
6/14	1245		3850	55	10.3	96	20.4	7.0	3.4	0.1	1.2	0.4	0	10		0.8			0.02		21
7/13	1045		1370	70	9.1	101	39.6	6.8	3.4	0.2	3.1	1.1	0	11		1.8			0.00		38
8/16	1450		372	74	8.3	96	40.9	7.2	5.1	0.2	2.4	0.7	0	19		1.5			0.14		27
KINGS RIVER BELOW NORTH FORK																					
9/13	1200			69	7.4	81	59.3	7.1	6.4	0.8	3.6	1.0	0	26	4.8	1.6	0.0	0.2	0.00	42	28
10/11	1200			66	9.6	103	68.1		6.7	1.2	4.4	1.1	0	28		1.3			0.04		29
11/9	1400		131	60	9.6	96	71.7		7.6	0.5	4.5	1.2	0	30		3.8			0.00		30
12/9	1330		1375	50	10.3	91	51.2		6.0	1.0	2.7	1.0	0	23		0.5			0.04		22
KINGS RIVER AT PINE FLAT DAM																					
9/12	0900		986	59	9.8	97	28.1	7.1	3.4	0.4	1.3	0.5	0	16	0.0	0.5	0.4	0.0	0.03	22	21
10/11	1330		72	71	8.1	91	62.9		6.4	1.6	3.3	1.1	0	29	3.2	1.0			0.03		23
11/9	1600		10	64	9.9	103	62.3		6.6	1.1	3.3	1.1	0	28		2.2			0.02		24
12/9	1540		40	55	11.1	104	62.0		6.6	1.3	3.8	1.3	0	28		2.5			0.00		26
KINGS RIVER AT PIEDRA T13S R24E, Sec. 8																					
1/11	1325			46	10.9	91	162	7.3	17	5.4	10	1.7	0	79		9.8			0.09		25
2/9	1635		241	49			87.6	7.6	8.9	2.1	5.3	1.0	0	40		3.5			0.00		26
3/8	1200		605	57	10.9	104	88.2	7.4	8.4	2.0	4.2	1.1	0	36		3.0			0.06		23
4/12	1100		1567	51	13.0	116	59.3	6.8	4.2	2.3	3.7	1.0	0	28		2.0			0.04		27
5/10	1030		705	61	10.0	101	46.9	7.2	2.5	2.2	3.2	0.8	0	24	2.3	0.8	0.2	0.1	0.01	38	30
6/14	1045		5262	55	11.1	104	27.6	7.8	2.5	1.0	1.4	0.4	0	13		0.8			0.05		22
7/13	0900		3798	70	9.8	109	35.6	6.8	2.8	0.4	3.4	1.4	0	9		1.2			0.02		42
8/16	1305		2340	53	11.5	105	51.8	7.2	6.0	0.7	3.2	0.8	0	26		1.0			0.07		27
KINGS RIVER AT PEOPLES WEIR T17S, R22E, Sec. 1																					
1/10	1600		35	46	10.3	86	212	7.3	22	5.6	14	2.1	0	109		7.0			0.17		27
2/10	1600		89	56	9.8	93	207	7.8	19	8.7	13	2.0	0	108		5.5			0.06		25
3/9	1530		253	61	9.1	91	103	7.2	9.6	3.4	5.9	1.4	0	50		3.5			0.04		24
4/13	1330		95	65	8.8	93	159	7.4	11	7.4	10	1.9	0	86		4.8			0.05		26
5/10	1550		140	73	8.4	97	116	7.3	11	3.3	7.2	1.5	0	59	5.1	3.8	0.1	0.1	0.04	78	27
6/15	1350		1090	64	9.0	94	35.8	6.8	4.0	1.2	2.5	1.0	0	20		0.5			0.02		25
7/14	0945		692	73	8.8	101	48.7	7.0	4.0	0.9	3.3	1.1	0	18		1.8			0.00		32
8/17	0815		1096	74	7.8	90	40.7	7.2	4.2	1.0	2.2	0.8	0	21		0.5			0.11		24
9/14	1720		377	68	7.9	86	43.9	6.9	4.7	1.1	2.5	0.7	0	23	2.6	0.5	0.3	0.2	0.01	32	24
10/11	0900		13	62	6.4	65	106	7.1	9.9	4.6	6.5	1.5	0	56		2.3			0.04		24
11/15	0915			49	9.7	85	234	7.3	20	6.7	16	3.2	0	118		8.0			0.00		30
12/13	1500			50	9.9	87	228	7.3	21	7.5	14	3.8	0	112		6.4			0.04		26

CHANGES TO PREVIOUSLY PUBLISHED WATER SUPERVISION REPORTS

Location of Error		Item	Change	
Page & Mile & Bank	Name		From	To
	Period 1924-1928,	Bulletin 23		
	1924			
4		Line 5	Irving	Irvin
80, 190	18.45L A. Linggi	General Acreage	40	30
82	114.2R Morse and Langdon	General Acreage	135	120
195	114.2R Morse and Langdon	Add to table 1924 Diversions May		69
		June		35
		July		35
		Total		139
		General Ac.		120
83	Table 71	Total General Acreage	104269	104244
	1925			
76	Table 67 - Sacramento River, Redding to Sacramento	1925 General Acreage	76200	77300
		Total Acreage	134200	135300
85, 195	36.7L Amedeo Morone	General Acreage	40	70
86, 211	76.1L J. H. Yates	General Acreage	35	53
89	Table 72	Total General Acreage	76222	77270
	1927			
99, 183	26.95R Hershey Estate	Diversions June	216	-
		July	388	216
		Aug.	130	388
		Sept.	-	130
102	90.0L Frank Beckley	Mile & Bank column	90.0L	98.0L
105	221.0R Johnson & Coates	Diversions July	168	158
105	Table 74	Total Diversions Apr.	31327	31328
		May	206864	206871
		June	234116	234108
	1928			
137	24.0L Alicia Mutual Water Co.	Footnote #3	May 19	May 18
	Period 1929-1954, Annual Reports			
	1929			
29	56.65R J. M. Miller	General Acreage	50	41
32	89.25L Phil B. Arnold	General Acreage	80	85
37	193.5L R. R. Howell	Diversions May	11	4
		June	9	11
		Aug.	20	16
		Sept.	6	5
		Total	69	59
39	Table 15	Total Diversions Apr.	138283	138284
		May	204360	204352
		June	167378	167380
		July	207785	207784
		Aug.	191346	191343
		Sept.	107103	107102
		Total	1060209	1060199
		Total General Acreage	136914	136910
40	Maxwell I. D. (Plant #6)	Diversions July	964	864
	1930			
26	30.75L J. G. Goulart	General Acreage	38	33
38	141.5L Parrott-Phelan Estate	Footnote #4	Total 12000	Total 12020
41	240.2L Wm. Menzel Meat Co.	General Acreage	110	85
42	Table 15	Total General Acreage	96577	96547
47	28.4R Butte Slough Irr. Co., Ltd. (West Borrow Pit of Sutter By-Pass)	Add to table Diversions June		239
		July		372
		Aug.		384
		Sept.		441
		Total		1436
	1931			
	All Diversion Tables	Total Diversion Heading	April to Oct.	March to Oct.
68	78.8R Sebia Davis	General Acreage	1500	-
		Rice Acreage	-	1500
74	Table 30	Total General Acreage	141505	141500
79	28.4R Butte Slough Irr. Co., Ltd. (West Borrow Pit of Sutter By-Pass)	Diversions Apr.	-	826
		May	-	3142
		June	239	2935
		July	372	1919
		Aug.	384	2456
		Sept.	441	1665
		Oct.	-	218
		Total	1436	13161
	1932			
41	63.75L Sutter Mutual Water Co.	Footnote #3	Total 8701	Total 8512
	1933			
71	154.8R Princeton-Codora-Glenn I.D.	General Acreage	2953	2957
72	240.2L Wm. Menzel Meat Co.	General Acreage	120	110
102	13.9R Mary Deterding	Total Acreage	35	70
102	Table 66	Total Acreage	2848	2883
	1934			
76	56.95L O. W. Stretter	Rice Acreage	300	288
82	240.2L Wm. Menzel Meat Co.	General Acreage	155	135

Location of Error		Item	Change	
Page & Mile & Bank	Name		From	To
	1934 (Contd.)			
82	Table 53	Total General Acreage	93783	93763
		Total Rice Acreage	56516	56504
	1935			
40	32.5R Collier Brothers	General Acreage	67	62
48	Table 29	Total General Acreage	98493	98488
	1936			
56	2.9L R. D. 833 (R. C. Ingram)	Diversions April	-	235
		May	-	623
		June	-	654
		Total	2243	3755
		Total Diversions Apr.	895	1130
		May	8015	8638
		June	7289	7943
		Total	48528	50040
61	24.0L Alicia Mutual Water Co.	General Acreage	771	761
62	Table 37	Total General Acreage	23990	23980
	1937			
50	88.7L W. D. DeJarnett	General Acreage	285	315
54	Table 32	Total General Acreage	100836	100866
66	2.4R No. Sacramento Land Co.	General Acreage	35	25
67	Table 39	Total General Acreage	3353	3343
	1938			
49	63.2R R. D. 108 (Wilkins Slough)	General Acreage	449	439
55	Table 35	Total General Acreage	85595	85585
56	8.65R S. Ashe	Footnote (5)	10" unit	14" unit
61	4.55L Ralph W. Pollock	General Acreage	50	75
62	Table 39 Knights Landing Ridge Cut	General Acreage	230	255
62	Table 39	Total General Acreage	6688	6713
	1939			
79	43.1R River Farms Co. (R.D. 2047 Plant)	General Acreage	5202	4540
		Rice Acreage	2803	2083
80	Table 56 Knights Landing to Wilkins Slough	Total General Acreage	13120	12458
84	94.3R Tuttle Land Co.	General Acreage	418	458
85	Table 56 - Colusa to Butte City	Total General Acreage	6802	6842
86	154.8R Glenn-Colusa I. D.	General Acreage	40529	40154
87	Table 56 - Butte City to Red Bluff	Total General Acreage	58185	57810
88	Table 56 - Sacramento to Redding	Total General Acreage	158768	157771
95	4.5N* R. S. Hughes (Sam Arnold)	Total Diversions	2242	2442
100	11.0R Hallwood I. D.	General Acreage	4724	4727
100	Table 62	Total General Acreage	6642	6645
	1940			
75	West Coast Life Ins. Co.	Mile & Bank Diversions Aug.	21.7L 4	21.7R 41
78	59.85R R.D. 108 (Steiner Bend Plant)	General Acreage	360	370
78	Table 61 - Knights Landing to Wilkins Slough	Total General Acreage	7318	7779
85	240.3R John Diestelhorst	Diversions Sept.	168	8
		Oct.	10	4
		Total	255	89
85	Table 61 - Red Bluff to Redding	Total Diversions Sept.	21172	21012
		Oct.	17191	17185
		Total	116052	115886
		Av. cu. ft./second Sept.	356	353
		Total	239	238
85	Table 61 - Sacramento to Redding	Total Diversions Sept.	119951	119791
		Oct.	43988	43982
		Total	1062630	1062464
		Av. cu. ft./second Sept.	2016	2013
		Oct.	715	716
		Total	2187	2186
		Total General Acreage	119730	120191
88	3.9R R. D. 1004	Change Note	Plant Disman-tled	No Diver-sions
92	0.7S Robert Swanston	Footnote #8	90 from well	60 from well
95	48.3L E. F. Bigge	General Acreage	362	352
95	Table 66	Total General Acreage	30117	30107
97	4.2R C. Swanston & Sons	General Acreage	173	160
98	Table 68	Total General Acreage	861	848
	1941			
85	49.7L O. J. Glenn	Correct name	O. J. Glenn	Glenn J. Hiatt

CHANGES TO PREVIOUSLY PUBLISHED WATER SUPERVISION REPORTS (Contd.)

Location of Error			Item	Change	
Page	Mile & Bank	Name		From	To
		1941 (Contd.)			
91		Table 62 - Colusa to Butte City	Total Diversions Apr. Monthly Use in % of Seasonal	15 0.1	16 0.2
94		Table 62 - Sacramento to Redding	Total Diversions Apr. Total	5274 1150115	5275 1150116
105	55.1L	Hearst Estate	Diversions Total	740	704
		1942			
96	158.8R	Glenn-Colusa I. D.	General Acreage	30579	30649
97	196.6L	S. & E. Erickson	General Acreage	36	33
97		Table 69 - Butte City to Red Bluff	Total General Acreage	47696	47763
98		Table 69 - Sacramento to Redding	Total General Acreage	111226	111293
107	18.75R	O. C. Shannon	General Acreage	24	74
108		Table 74	Total General Acreage Total Rice Acreage	38477 25177	25177 38477
		1943			
93	81.9R	Steidlmayer Bros.	General Acreage	860	760
93	87.7R	Swinford Tract Irr. Co.	Total Diversion	260	270
93		Table 71 - Wilkins Slough to Colusa	Total Diversions April May June July Aug. Sept. Oct. Total Av. Cu. Ft./second April May June July Aug. Sept. Total Monthly Use in % of Seasonal May June July Aug.	 24118 72132 64403 68480 68837 35620 125 333715 405 1174 1081 1114 1120 599 686 21.6 19.3 20.6 20.6	 27294 79393 73922 78376 78725 40501 135 378346 459 1293 1242 1276 1282 681 778 21.0 19.5 20.7 20.8
98		Table 71 - Sacramento to Redding	Total General Acreage Total Diversions April May June July Aug. Sept. Oct. Total Av. Cu. Ft./second April May June July Aug. Sept. Oct. Total Monthly Use in % of Seasonal April May June Aug. Sept. Oct. Total General Acreage	29580 61409 257673 276759 288930 288024 190456 51915 1416935 1032 4191 4651 4699 4684 3201 844 2916 4.3 18.2 19.5 20.3 13.5 3.7 126266	29480 64585 264934 286278 298826 297912 195337 51925 1461566 1085 4315 4811 4867 4852 3283 846 3007 4.4 18.1 19.6 20.4 13.4 3.6 126166
101	33.0R	A. Davis Estate	Mile & Bank column	(4)	(6)
101	33.9L	Mrs. Belle Moore	Footnote (4)	Delete	(4)
101	37.0L	W. H. O'Hair	Diversions Aug.	771	774
108	17.5L	Plumas Mutual Water Co.	General Acreage	795	815
109		Table 76	Total General Acreage	24089	24104
		1944			
T-55		Runoff in Acre-Feet	October	5105	10130
T-98-2	9.35R	Capital Company	General Acreage	335	325
T-98-2	14.1L	Elkhorn Mutual Water Co.	Rice Acreage	2869	2868
T-98-3		Table 98 - Sacramento to Verona	Total General Acreage Total Rice Acreage	8781 11687	8771 11686
T-98-5	42.0R	El Dorado Ranch (Lohse)	General Acreage Rice Acreage	307 500	450 450
T-98-6		Table 98 - Knights Landing to Wilkins Slough	Total General Acreage Total Rice Acreage	8086 14459	8229 14409
T-98-9	94.3R	Tuttle Land Co.	General Acreage	257	157
T-98-10		Table 98 - Colusa to Butte City	Total General Acreage	4478	4378
T-98-11		Glenn-Colusa I. D.	Rice Acreage	36227	36223
T-98-11		Provident Irrigation District	General Acreage Rice Acreage	1107 7582	836 7588
T-98-11		Footnote (8)	General Acreage	33	43
T-98-12		Table 98 - Butte City to Red Bluff	Total General Acreage Total Rice Acreage	40614 56620	40343 56622
T-98-13		Table 98 - Sacramento to Redding	Total General Acreage Total Rice Acreage	111871 122243	111633 122194
T-99-2	22.0R	Henry Jameson Estate	Rice Acreage	160	360
T-99-2		Table 99 - Colusa Trough	Total Rice Acreage	4487	4687
T-100-1	1.45R	River Farms Co.	Footnote (1)	Delete	(1)

Location of Error			Item	Change	
Page	Mile & Bank	Name		From	To
		1944 (Contd.)			
T-100-1	24.6L	H. H. Balsdon	General Acreage	725	745
T-100-2		Table 100	Total General Acreage	965	985
103	18.0R	Harms Brothers	Footnote 19		Add: "at which time it was listed as Mile 18.95R"
		1945			
105	43.1R	R. D. 2047	General Acreage	1447	1347
105	60.4L	F. L. Burrell	Rice Acreage	150	50
105		Table 109 - Knights Landing to Wilkins Slough	Total General Acreage Total Rice Acreage	9757 13094	9657 12994
107	141.5L	M & T Inc. & Parrott Investment Co.	General Acreage Rice Acreage	4020 1960	4096 1962
108		Table 109 - Butte City to Red Bluff	Total General Acreage Total Rice Acreage	36103 48715	36179 48717
108		Table 109 - Sacramento to Redding	Av. Cu. Ft./second July Aug. Total General Acreage Total Rice Acreage	 5766 5422 106545 115115	 5641 5304 106521 115017
110	0.3L	Back Borrow Pit - River Farms	Total Diversion	1748	4748
110	4.5R	Table 112, Kenneth Lowe	Rice Acreage Total Rice Acreage	300 3320	350 3370
112	1.4N (1.75)	E. H. Christenson (Hale Ranch)	Change note	Plant Removed	No Diversion
113	2.6R	Walter Raymond	June Diversion Total Diversion	763 6946	712 6895
113		Table 116	Total June Diversion Total Diversion	133918 698394	133867 698343
		1946			
103	9.35R	Capital Co (Utterback)	General Acreage	165	162
103	14.1L	Elkhorn Mutual Water Co.	General Acreage	2038	2035
104		Table 115 - Sacramento to Verona	Total General Acreage	10722	10716
106	69.0R	J. L. Browning	General Acreage	210	476
107	88.7L	W. D. DeJarnett & Mayfair Packing Co.	General Acreage	174	114
107		Table 115 - Wilkins Slough to Colusa	Total General Acreage	30861	31067
108	112.1L	R. D. 1004	Diversions Total	37010	47010
108		Table 115 - Colusa to Butte City	Total Rice Acreage	8445	6445
108	116.7R	Butte City Ranch	General Acreage	-	35
108	123.9R	Princeton-Codora Glenn I.D.	Footnote (8)	General Acreage	Total Diversion
108	124.2R	Provident I. D.	Footnote (8)	General Acreage	Total Diversions
108	154.8R	Glenn-Colusa I. D.	Footnote (16)		Insert "not" after April
109	154.8R	Princeton-Codora-Glenn I.D.	General Acreage Rice Acreage	2204 3458	2143 3531
109		Table 115 - Butte City to Red Bluff	Total Diversions July Total Av. Cu. Ft./second July Total General Acreage Total Rice Acreage	 129460 729606 2170 38934 53195	 129461 729607 2108 38873 53268
109	206.75L	C. C. Budd	Total Diversion	-	(8)
109	246.0R	Anderson-Cottonwood I.D.	Diversions July	22625	23625
109		Table 115	Total Diversions July Av. Cu. Ft./second July Total General Acreage Total Rice Acreage	341952 5560 117556 124135	341953 5569 117695 124208
110	Opp. 7.25R	Charles Welch	General Acreage	200	-
110		Table 116	Total General Acreage	3030	2830
		1947			
67		Table 55 - Yolo By-Pass near Woodland	Runoff in Acre-Feet Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.	 367 9099 10727 3535 1480 774 1592 1387 1827 437 233.6 315.7	 728 18050 21280 7010 2940 1540 3160 2750 3620 867 463 626
91	30.2L	Table 93, Leo Giovanetti	Add name & note "no diversion" to table		
96	154.8R	Glenn-Colusa I. D.	General Acreage	22881	22971
97		Table 93 - Butte City to Red Bluff	Total General Acreage	38149	38239
97		Table 93 - Sacramento to Redding	Total General Acreage Total Rice Acreage	243180 247962	121680 123981

CHANGES TO PREVIOUSLY PUBLISHED WATER SUPERVISION REPORTS (Contd.)

Location of Error		Item	Change	
Page	Mile & Bank Name		From	To
		1947 (Contd.)		
99	33.5R Davis Estate	Following name	(10)	(11)
		General Acreage	(11)	(10)
		Rice Acreage	(11)	(10)
99	33.7L Davis Estate	Mile & Bank	33.7L	33.7R
		General Acreage	(11)	(10)
		Rice Acreage	(11)	(10)
		1948		
99	Table 104 - Back Borrow Pit	1948 Diversion	82500	59100
104	18.0R Jose Alves & Sons	Diversions July	76	759
104	Table 105 - Sacramento to Verona	Total Diversions July	34239	34922
		Total	137292	137975
		Av. Cu. Ft./second July	557	569
		Total	283	284
		Monthly use in % of Seasonal July	24.9	25.3
106	63.75L Sutter Mutual Water Co.	Footnote (p)	"an additional"	"includes"
107	70.4R Nofman, Beckley, Ritchie, Poundstone & Denny	Rice Acreage	450	430
107	76.2L M. S. Davis & C. K. Anderson	Footnote (k)	170	17
108	Table 105 - Wilkins Slough to Colusa	Total Rice Acreage	33503	33483
110	Table 105 - Sacramento to Redding	Total Diversions July	365701	366384
		Total	1593474	1594157
		Av. Cu. Ft./second July	5947	5967
		Total	3279	3280
		Total Rice Acreage	128314	124097
111	11.7L Charles Welch	Footnote (a)	11.8R	11.7R
111	Opp. 21.4R Walter McGowan	Mile & Bank	Opp. 21.4R	21.4R
		Rice Acreage	350	400
111	Table 106	Total Rice Acreage	4745	4795
112	0.3L River Farms Company	Diversions Mar.	4404	440
		April	845	85
		May	8846	885
		June	1789	179
		July	5106	511
		Aug.	1593	159
		Sept.	3431	343
		Total	26014	2602
		Total Diversions March	4537	573
		April	1810	1050
		May	17659	9698
		June	12195	10585
		July	20392	15797
		Aug.	15261	13827
		Sept.	10433	7345
		Total	82497	59085
		Av. Cu. Ft./second March	74	9.3
		April	30	16
		May	287	158
		June	205	178
		July	332	257
		Aug.	248	225
		Sept.	175	123
		Total	170	122
		Monthly use in % of Seasonal March	5.5	0.9
		April	2.2	1.8
		May	21.4	16.4
		June	14.8	17.9
		July	24.8	26.7
		Aug.	18.5	23.4
		Sept.	12.6	12.4
119	2.75R No. Sacramento Lands Co.	Delete note	Delete note "No Diversion"	
		Diversions July	-	1
		Sept.	-	2
		Oct.	-	1
		Total	-	4
		General Acreage	-	5
119	American River	Total Diversions July	1737	1738
		Sept.	1030	1032
		Oct.	495	496
		Total	5883	5887
		Total General Acreage	3628	3633
		1949		
125	15.1R J. A. Damron	General Acreage	150	250
125	Table 142 - Sacramento to Verona	Total General Acreage	14341	14441
125	19.6L (2.0S) Natomas Northern Mutual Water Co.	General Acreage	1508	2295
125	22.5R Henry Rich (Keller Plant)	Rice Acreage	780	880
126	Table 142 - Verona to Knights Landing	Total General Acreage	5511	6298
		Total Rice Acreage	7337	7437
129	88.4L Rosa Wilbur	Change name	Rosa Wilbur	Mrs. W. D. Jarnett
131	141.5L M & T Inc. & Farrott Inveatment Co.	General Acreage	3468	3469
131	146.1R Lloyd & D. A. Nazelton	Diversions Oct.	22	-
		Total	104	22
		General Acreage	0	104

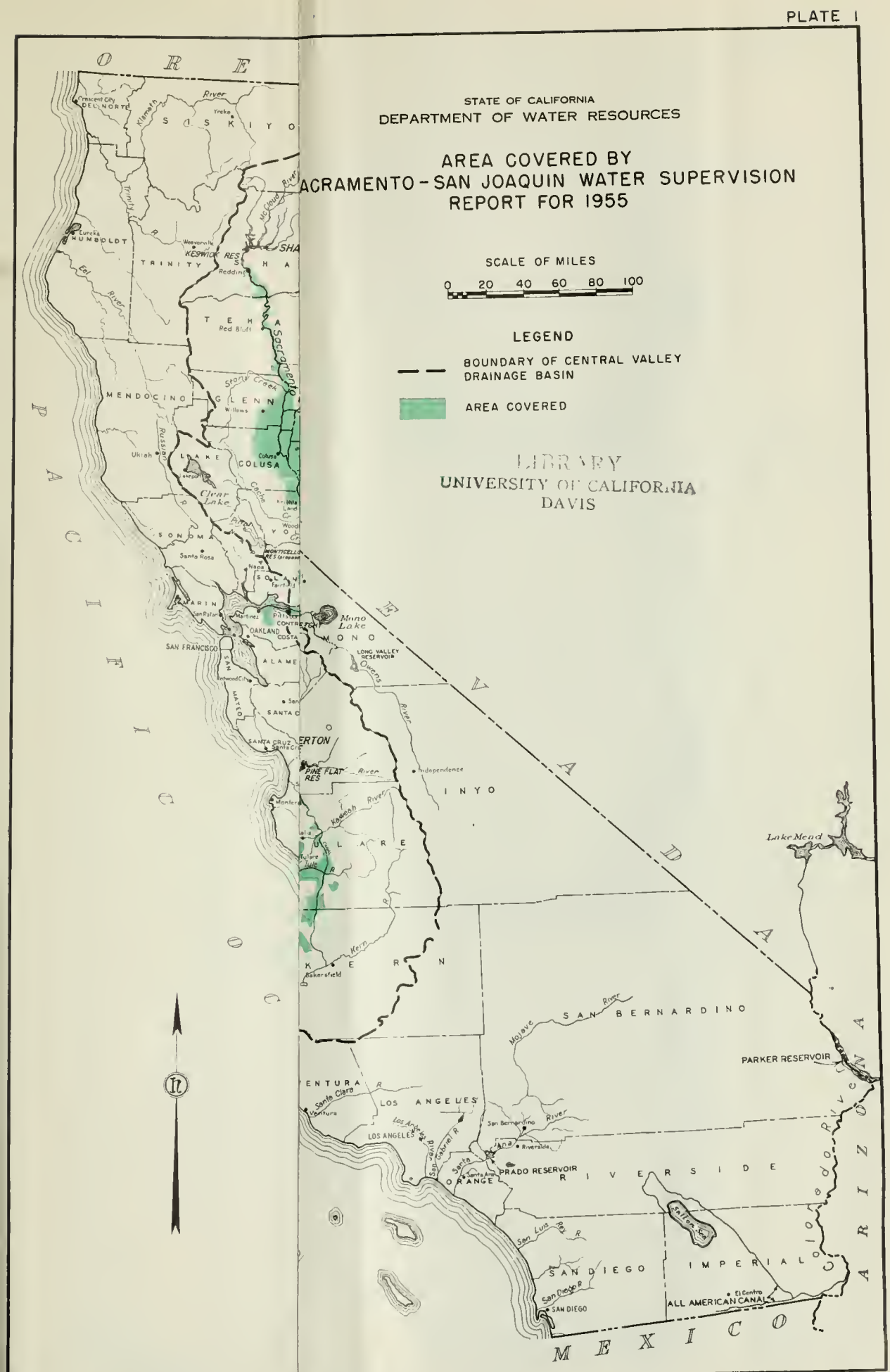
Location of Error		Item	Change	
Page	Mile & Bank Name		From	To
		1949 (Contd.)		
131	154.8R Glenn-Colusa I. D.	General Acreage	26128	26158
132	Table 143 Butte City to Red Bluff	Total General Acreage	48721	48752
132	246.3R I. & M. Diestelhorst	General Acreage	24	14
132	Table 143 - Red Bluff to Redding	Total General Acreage	18375	18365
132	Table 143 - Sacramento to Redding	Total General Acreage	143495	144403
		Total Rice Acreage	137269	137369
137	10.0N Martin Gun Club	Footnote (x)	Nov. 18	Nov.150 & Dec. 50
		1950		
130	63.2R R. D. 108 (Wilkins Slough)	General Acreage	1644	1841
131	80.0L Meridian Farms Water Co. #1 & #2	Footnote (o)	includes 1063 acres	an additional 960 acres of general crops
132	Wilkins Slough to Colusa	General Acreage	39099	39296
132	88.4L Rosa Wilbur	Change name	Rosa Wilbur	Mrs. W. D. Jarnett
133	112.4R Princeton-Codora-Glenn I. D.	Footnotes (c) and (b)	Delete from (c) & add to (b). Includes 772 acres of duck club lands of which 567 is reused rice lands. Includes 330 acres rice and 75 acres general crop lands outside district.	
135	240.5L Anderson-Cottonwood I. D.	General Acreage	18610	18360
135	Table 152 - Red Bluff to Redding	Total General Acreage	19087	18837
135	Table 152 - Sacramento to Redding	Total General Acreage	152817	152764
138	32.6R Federal Fish & Wildlife	Note (c)	Delete from General Acreage. Add to Rice Acreage.	
140	0.9S Butte Slough - George Smith	Diversions June	-	10
		1951		
135	63.2R R. D. 108 (Wilkins Slough)	Rice Acreage	1542	11542
137	Wilkins Slough to Colusa	Total Rice Acreage	22823	32823
141	9.75L I. O. Zumwalt	Rice Acreage	427	456
141	Colusa Trough	Total Rice Acreage	6640	6669
145	0.0 Butte Slough Irr. Co., Ltd.	Footnote (v)	Add footnote (v): Mile 0.0 was listed as Mile 0.3W prior to 1951.	
		1952		
72	Table 48	Runoff in acre-feet July	36910	36320
		Water year total	591360	590770
		Calendar year total	661590	661000
142	81.8L Wayne Nall	Footnote (h)	C. Reische	F. Reische
147	10.5L (0.4) Lloyd Kahn	Mile & Bank	10.5L (0.4)	10.5L (0.4S)
		1953		
97	Table 94	Daily Flow May 20	755	730
		May 21	1200	1220
		May 25	1640	1670
		May 26	1670	1690
		May 27	2150	1250
		May 28	2320	1100
		May 29	2320	1100
		May 30	2310	1100
		May 31	2320	1100
		Mean	1104	919
		Runoff in acre-feet	67870	56520
		Daily flow June 1	2320	1100
		June 2	1820	1520
		June 8	2200	2220
		June 10	1670	1640
		June 11	1720	1580
		June 12	1720	1580
		June 13	1720	1580
		June 14	1670	1610
		June 15	1420	1880
		June 16	1500	1770
		June 17	1460	1820
		June 18	1400	1890
		June 19	927	2460
		June 20	974	2380
		June 21	582	2970
		June 22	262	3570
		June 23	977	2420
		June 24	1370	1900
		June 25	1040	2290
		June 26	1270	2000
		June 27	1390	1860
		June 28	1460	1780
		June 29	1690	1530
		Mean	1486	1913
		Runoff in acre-feet	88450	113800
		Water year total	512700	526700
		Calendar Year Total	518130	532130

CHANGES TO PREVIOUSLY PUBLISHED WATER SUPERVISION REPORTS
(Continued)

Location of Error		Item	Change	
Mile Page & Bank			From	To
	1953 (Contd.)			
188	Table 209 - Flow for minimum 10-day period	Sacramento & San Joaquin to Delta - 1953	4350	8690
	1954			
53	Table 4 - San Joaquin River Delta-Mendota Canal	Deliveries - Jan.	5169	0
		Feb.	50285	24921
		Mar.	69033	59848
		Apr.	119288	99325
		May	80636	63999
		June	173429	147710
		July	196487	162006
		Aug.	174795	149400
		Sept.	107779	97507
		Oct.	54734	44198
		Nov.	13492	9572
		Dec.	498	0
		Total	1045625	858486
		Measured Inflow Jan.	25059	19890
		Feb.	68630	43266
		Mar.	74472	65287
		Apr.	129241	109278
		May	151462	134825
		June	179822	154103
		July	198355	163874
		Aug.	177496	152101
		Sept.	110145	99873
		Oct.	57316	46780
		Nov.	21846	17926
		Dec.	15380	14882
		Total	1209224	1022085
		Unmeasured Accretions Jan.	-7086	-1917
		Feb.	-36137	-10773
		Mar.	-14473	-5288
		Apr.	-24495	-4532
		May	-23621	-6984
		June	-34559	-8840
		July	-45417	-10936
		Unmeasured Accretions Aug.	-32993	-7598
		Sept.	-17665	-7393
		Oct.	-7854	+2682
		Nov.	-4578	-658
		Dec.	-1055	-557
		Total	-249933	-62794
	Millerton Lake to Vernalis	Total Unmeasured Accretions Jan.	+9369	+14538
		Feb.	+3951	+29315
		Mar.	+42325	+51510
		April	+34245	+54208
		May	+25809	+42446
		June	+13606	+39325
		July	-22937	+11544
		Aug.	-13939	+11456
		Sept.	+5049	+15321
		Oct.	+7796	+18332
		Nov.	+6043	+9963
		Dec.	+19262	+19760
		Total	+130579	+317718
187	Table 202 - Delta-Mendota Canal	Net Deliveries April	99329	99167
		June	147710	146260
		July	162006	161207
		Aug.	149609	148629
		Sept.	97509	97288
		Nov.	9578	9572
		Total	855416	851798
		Add footnote *** and reference to "Net deliveries" line	This item does not include deliveries to Panoche Water District etc., via Mendota Pool and C.C.I.D. outside canal	
196	Table 218 - Flow for minimum 10-day period	Sacramento and San Joaquin to Delta - 1953	4350	8690

Note: All corrections found have been made in the general tables. However, only total corrections of 1,000 or more acres or acre-feet have been carried over to the summary tables.

PLATES


STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
AREA COVERED BY
ACRAMENTO - SAN JOAQUIN WATER SUPERVISION
REPORT FOR 1955
SCALE OF MILES
0 20 40 60 80 100
LEGEND
BOUNDARY OF CENTRAL VALLEY DRAINAGE BASIN
AREA COVERED
LIBRARY
UNIVERSITY OF CALIFORNIA
DAVIS
PACIFIC OCEAN
NEVADA
ARIZONA
MEXICO
Mono Lake
Lake Mead
PARKER RESERVOIR
ALL AMERICAN CANALS
PRADO RESERVOIR
PINE FLAT RES
LONG VALLEY RESERVOIR
KESWICK RES
MONTICELLO RES
SAN FRANCISCO
OAKLAND
LOS ANGELES
SAN DIEGO
Crescent City
DEL NORTE
HUMBOLDT
TRINITY
SHASTA
MENDOCINO
GLENN
COLUSA
LAKE
SONOMA
MARIN
SOLANO
ALAMEDA
CONTRA COSTA
SANTA CLARA
SANTA CRUZ
MONTEREY
SAN BENITO
FRESNO
TULARE
KERN
INYO
MONO
SAN BERNARDINO
RIVERSIDE
ORANGE
VENTURA
IMPERIAL
Redding
Red Bluff
Willows
Ukiah
Clear Lake
Santa Rosa
Napa
Martinez
Richmond
Hayward
San Rafael
Sausalito
Fairfield
Vallejo
Monterey
Salinas
Hollister
Gilroy
Watsonville
Fresno
Visalia
Tulare
Bakersfield
Independence
Riverside
San Bernardino
Santa Ana
Ventura
Santa Barbara
El Centro
Yreka
Weaverville
Eureka
Willits
Woodland
Colusa
Sacramento River
Trinity River
Klamath River
Eel River
Russian River
Clear Lake
Cache Creek
Putah Creek
Stony Creek
McCloud River
Pit River
Feather River
Yuba River
American River
Mokelumne River
Calaveras River
San Joaquin River
Kaweah River
Kings River
Kern River
Tule River
Owens River
Mojave River
Santa Ana River
San Gabriel R
Los Angeles River
San Luis Rey R
San Diego R
Salton Sea
Colorado River
N

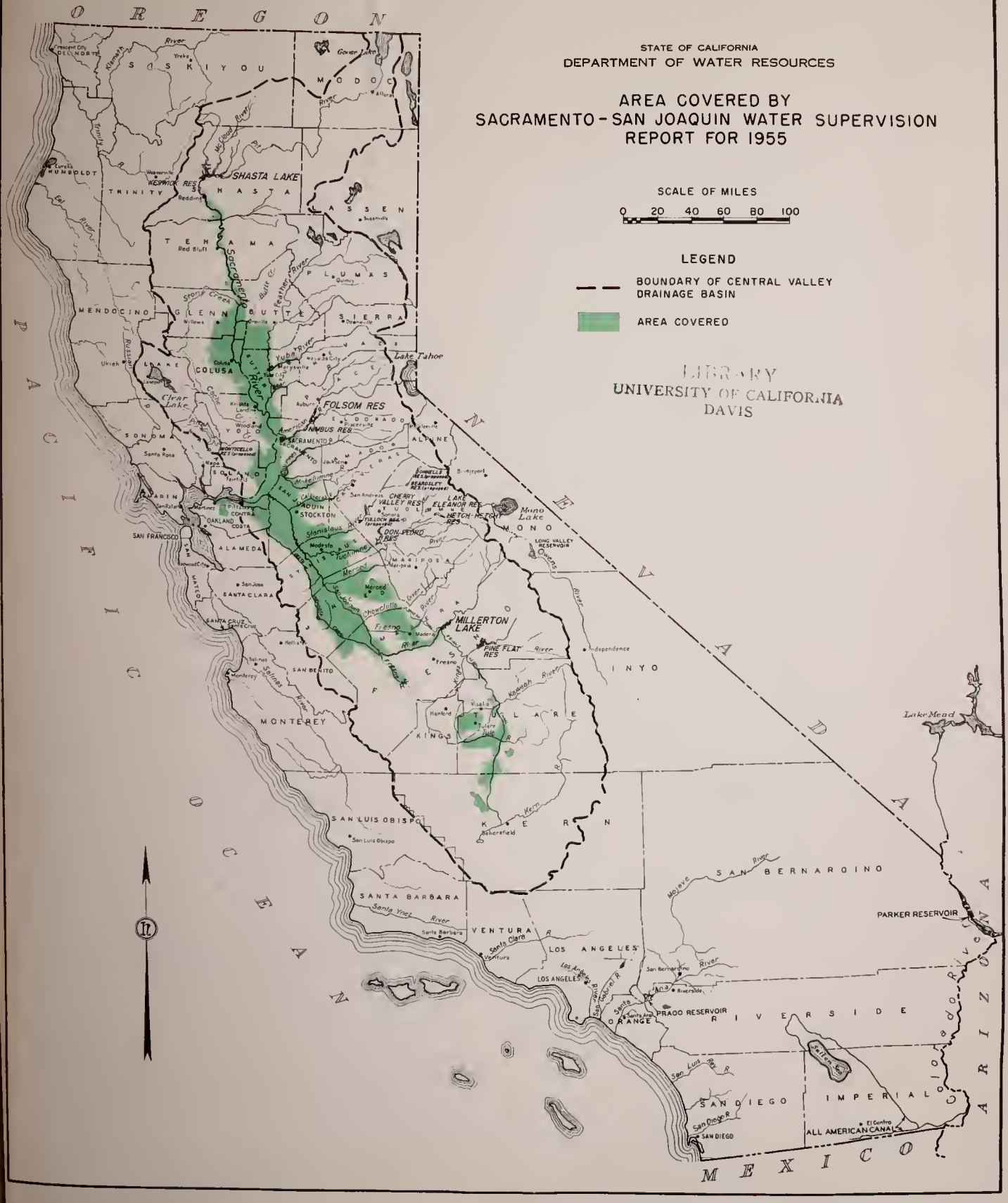
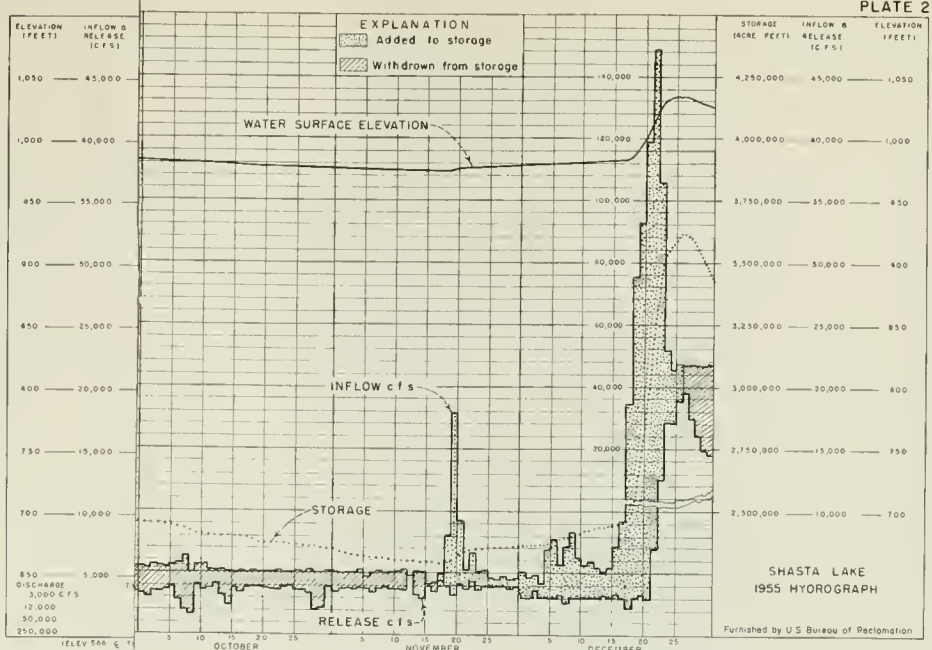
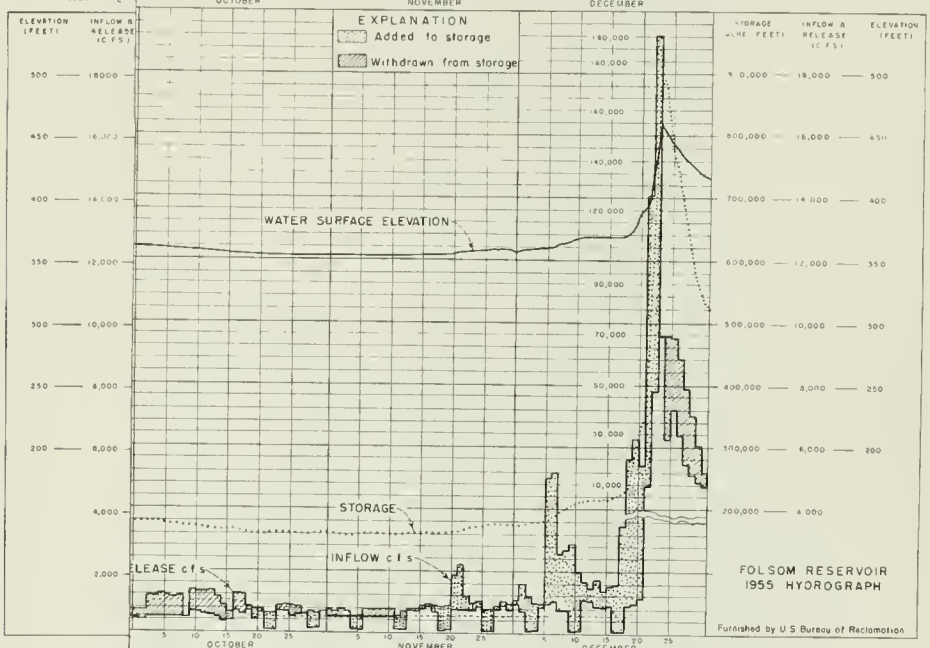

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
AREA COVERED BY
SACRAMENTO - SAN JOAQUIN WATER SUPERVISION
REPORT FOR 1955
SCALE OF MILES
0 20 40 60 80 100
LEGEND
BOUNDARY OF CENTRAL VALLEY DRAINAGE BASIN
AREA COVERED
LIBRARY
UNIVERSITY OF CALIFORNIA
DAVIS
OREGON
NEVADA
ARIZONA
MEXICO
PACIFIC OCEAN
SHASTA LAKE
FOLSOM RES
NIMBUS RES
MILLERTON LAKE
PINE FLAT RES
PARKER RESERVOIR
PRADO RESERVOIR
ALL AMERICAN CANAL
Lake Tahoe
Mono Lake
Lake Mead
SAN FRANCISCO
LOS ANGELES
SAN DIEGO
SISKIYOU
MODOC
TRINITY
SHASTA
LASSEN
TEHAMA
PLUMAS
MENDOCINO
GLENN
BUTTE
SIERRA
LAKE
COLUSA
YUBA
NEVADA
PLACER
EL DORADO
SONOMA
YOLO
SACRAMENTO
ALPINE
NAPA
SOLANO
AMADOR
MARIN
CONTRA COSTA
ALAMEDA
SAN JOAQUIN
STANISLAUS
TUOLUMNE
CALAVERAS
ALPINE
MONO
MARIPOSA
SANTA CLARA
MERCED
MADERA
FRESNO
INYO
SAN BENITO
MONTEREY
KINGS
TULARE
KERN
SAN LUIS OBISPO
SANTA BARBARA
VENTURA
SAN BERNARDINO
RIVERSIDE
ORANGE
IMPERIAL
SAN DIEGO

PLATE 2





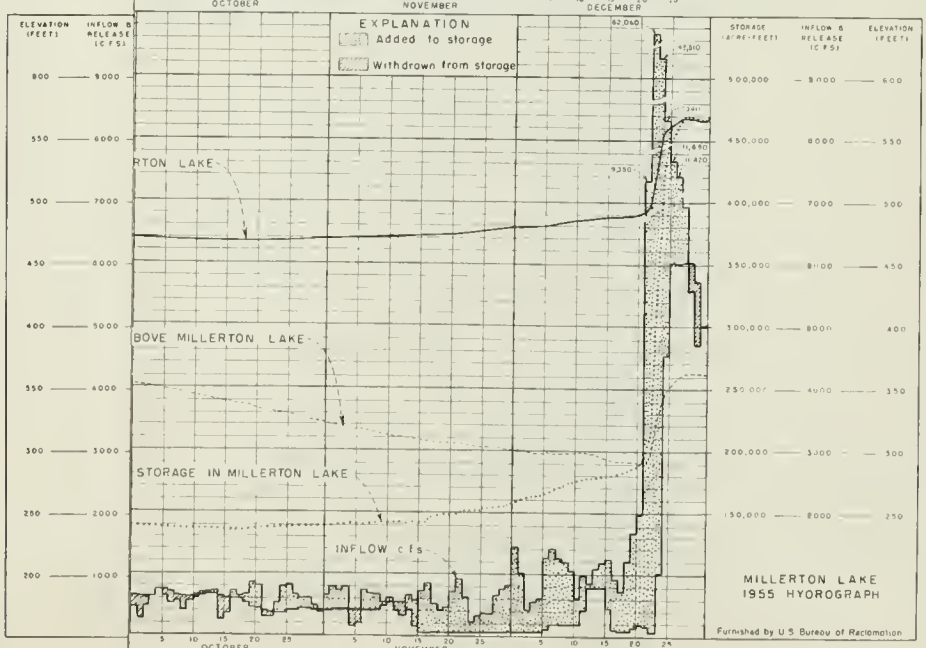
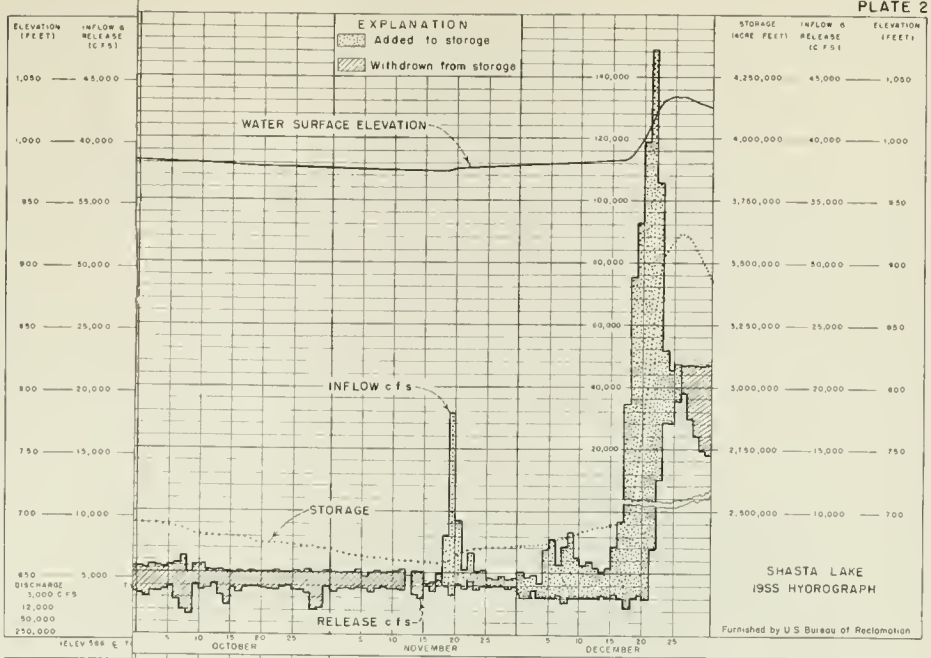
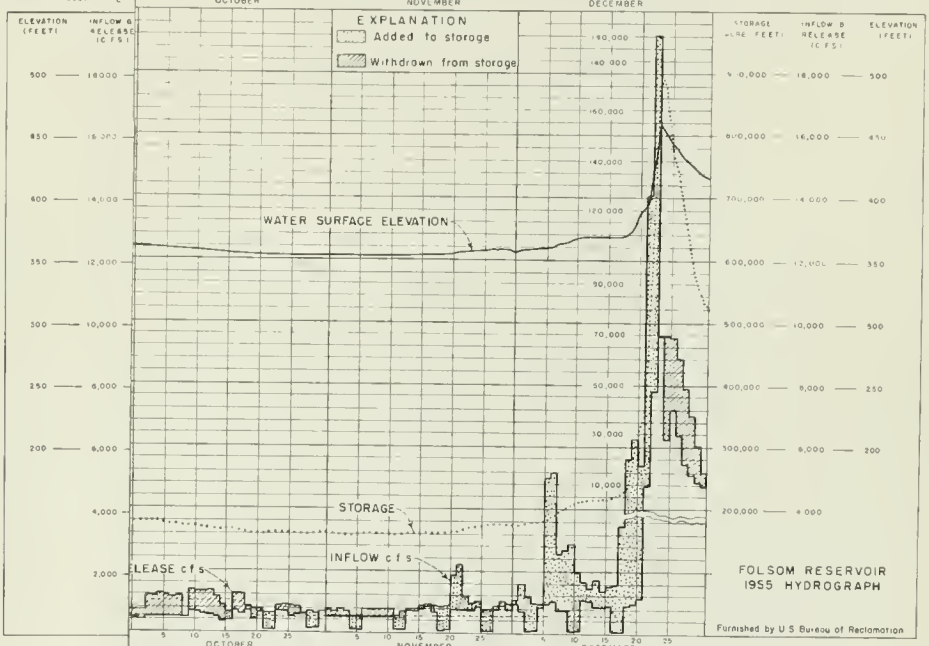


PLATE 2





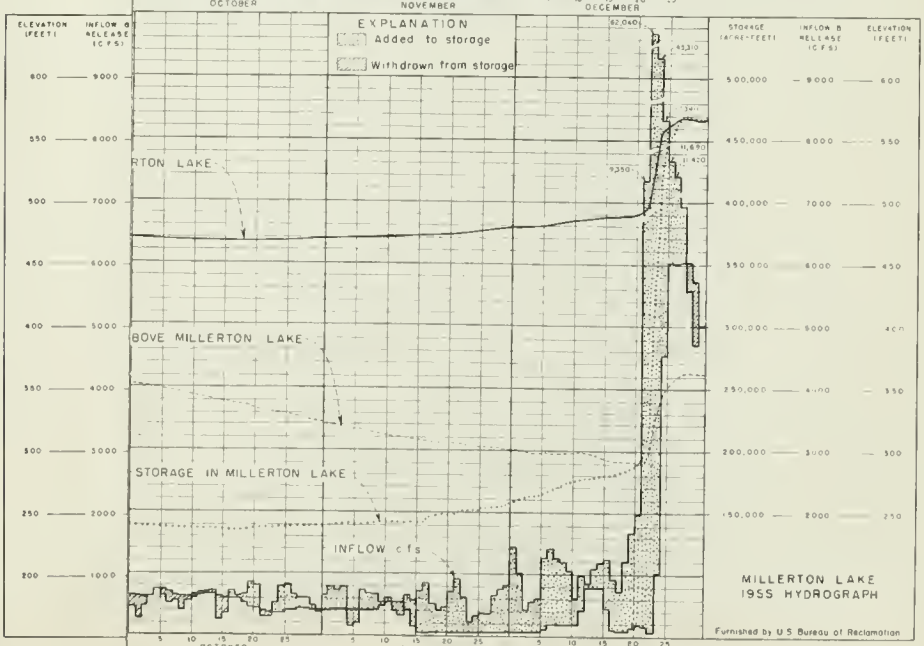
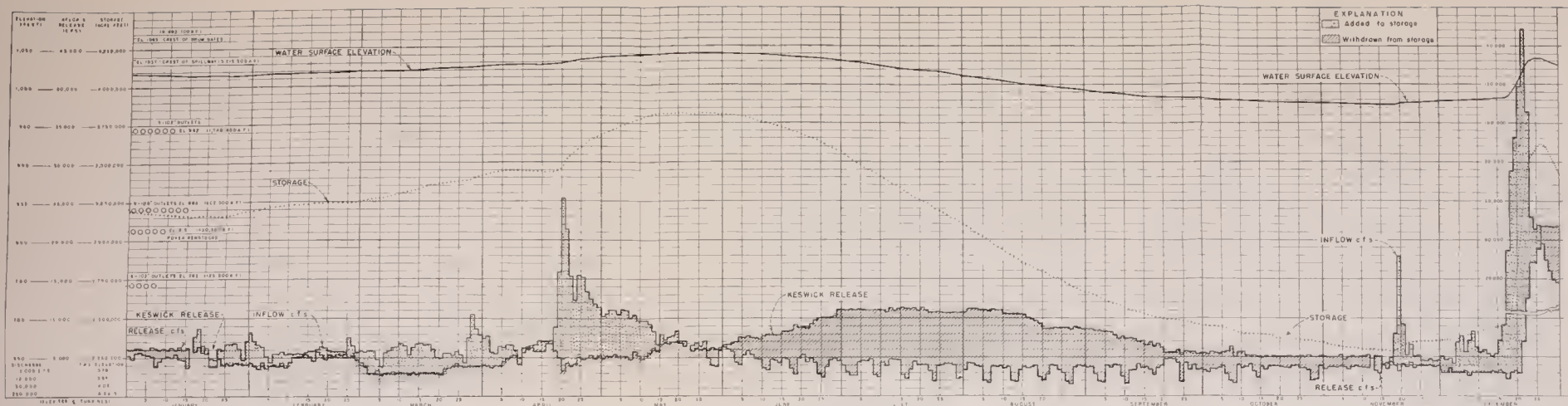
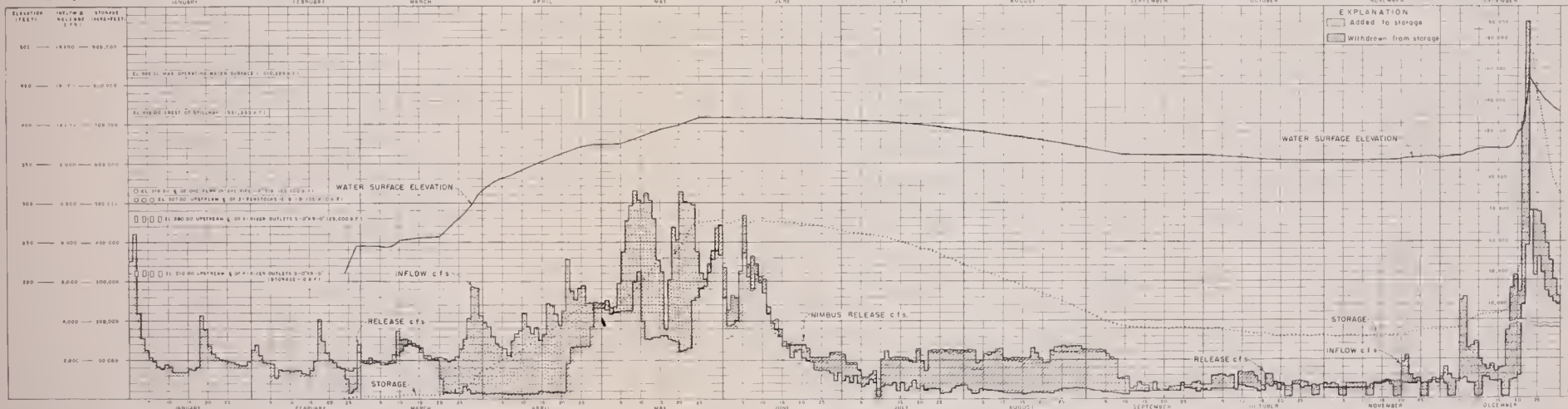


PLATE 2



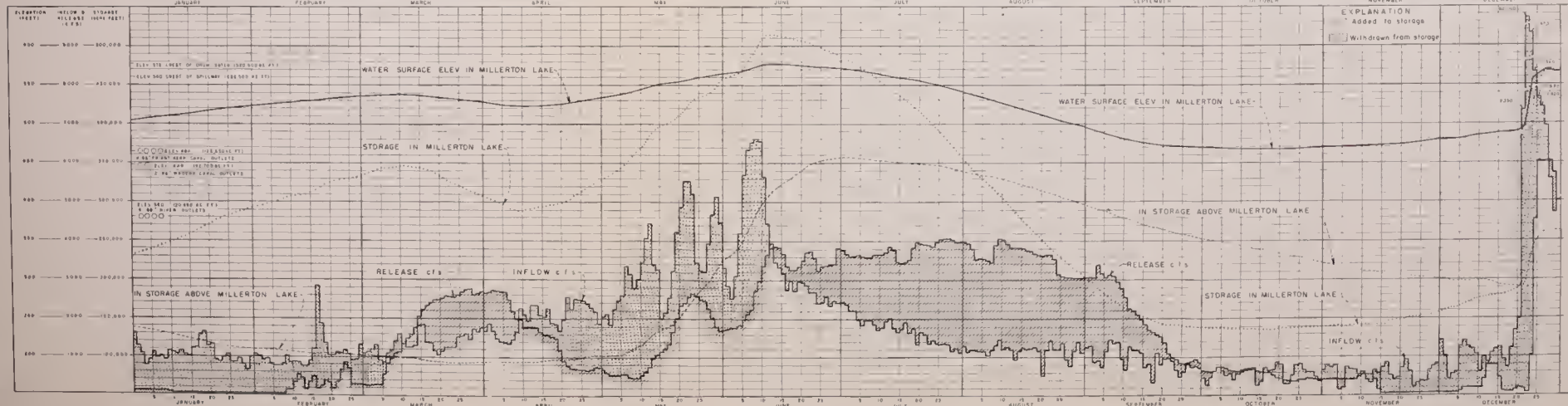
SHASTA LAKE
1955 HYDROGRAPH

Furnished by U S Bureau of Reclamation



FOLSOM RESERVOIR
1955 HYDROGRAPH

Furnished by U S Bureau of Reclamation



MILLERTON LAKE
1955 HYDROGRAPH

Furnished by U S Bureau of Reclamation

LEGEND

- Delta Service Area
- Delta Lowlands
- Historical Delta
- Delta Inflow Stations
- Limit of maximum seasonal encroachment of salinity of 1000 parts of chloride per million parts of water
- Salinity Observation Stations

1	Isleton Bridge
2	Rio Vista Bridge
3	Three Mile Slough Bridge
4	Collinsville
5	Vernalis
6	Mossdale Bridge
7	Clifton Court Ferry
8	East Contra Costa I D
9	Dutch Slough
10	Opposite Central Landing
11	Millers Harbor
12	Antioch
13	Pittsburg
14	O & A Ferry
15	Port Chicago
16	Innisfail Ferry
17	West Suisun
18	Martinez
19	Benicia
20	Crockett
21	Emmaton (opp Toland Landing)
22	Holland Tract
23	Webb Point
24	San Andreas Landing
25	Webb Pump
26	Oulton Point
27	Three Mile Slough, S J
28	Piper Slough
29	Webb Ferry
30	Jersey Island
Off Map	Grandview
Off Map	Point Davis
Off Map	Point Pinole
Off Map	Point Orient

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SACRAMENTO - SAN JOAQUIN WATER SUPERVISION

LINES OF SALINITY ENCROACHMENT
SACRAMENTO - SAN JOAQUIN DELTA AND UPPER BAYS

1955

Scale of miles
0 2 4 6 8 10

LEGEND

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- Delta Lowlands
- Historical Delta
- Delta Inflow Stations
- Limit of maximum seasonal encroachment of salinity of 1000 parts of chloride per million parts of water
- Salinity Observation Stations

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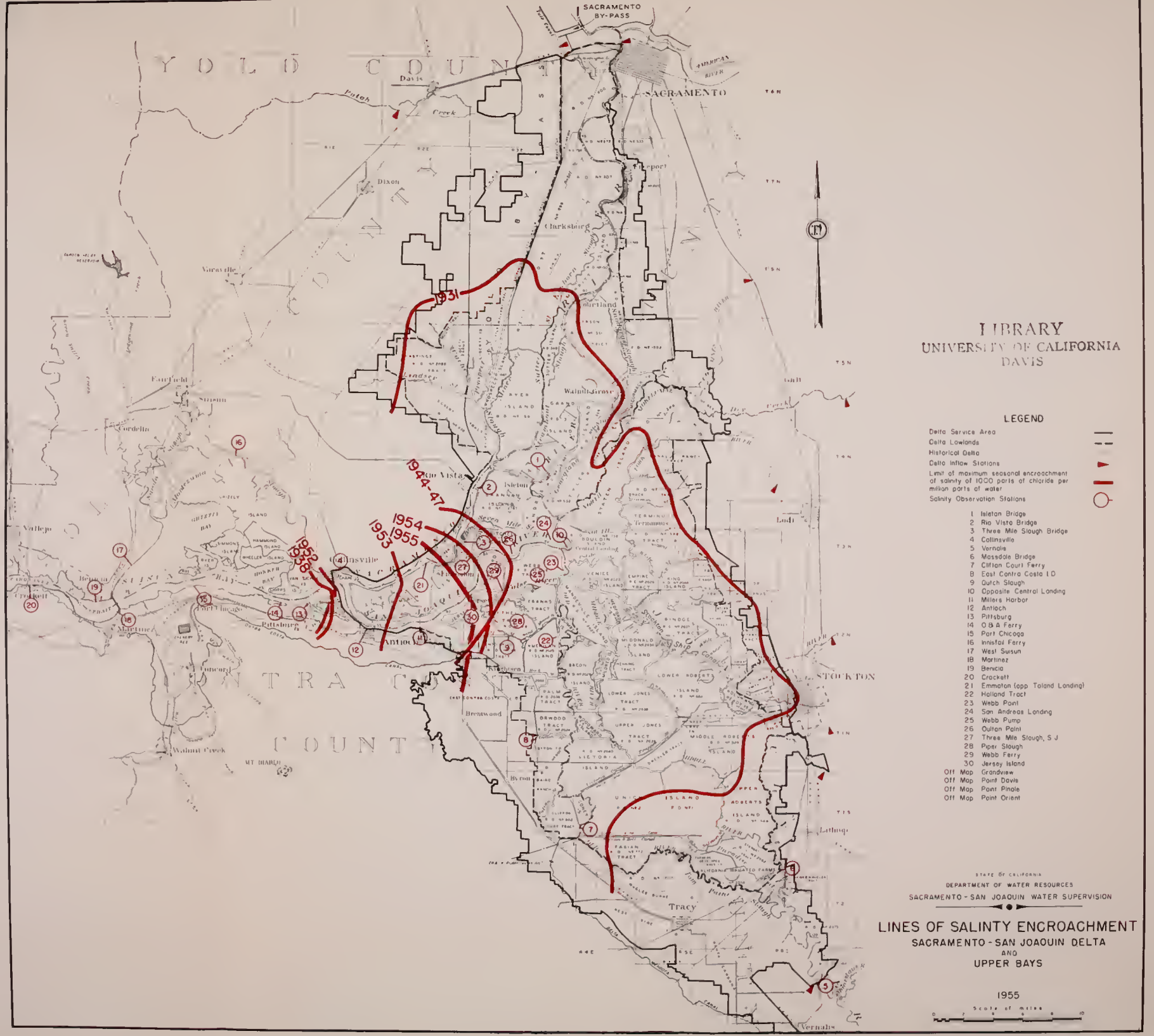
3	Three Mile Slough Bridge
4	Collinsville
5	Vernalis
6	Mossdale Bridge
7	Clifton Court Ferry
8	East Contra Costa I.D
9	Dutch Slough
10	Opposite Central Landing
11	Millers Harbor
12	Antioch
13	Pittsburg
14	O & A Ferry
15	Port Chicago
16	Innisfail Ferry
17	West Suisun
18	Martinez
19	Benicia
20	Crockett
21	Emmaton (opp Toland Landing)
22	Holland Tract
23	Webb Point
24	San Andreas Landing
25	Webb Pump
26	Dulton Point
27	Three Mile Slough, S J
28	Piper Slough
29	Webb Ferry
30	Jersey Island
Off Map	Grandview
Off Map	Point Davis
Off Map	Point Pinole
Off Map	Point Orient

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SACRAMENTO - SAN JOAQUIN WATER SUPERVISION

LINES OF SALINTY ENCROACHMENT
SACRAMENTO - SAN JOAQUIN DELTA AND UPPER BAYS

1955

Scale of miles
0 2 4 6 8 10



LEGEND

- Delta Service Area
- Delta Lowlands
- Historical Delta
- Delta Inflow Stations
- Limit of maximum seasonal encroachment of salinity of 1000 parts of chloride per million parts of water
- Salinity Observation Stations

1 Isleton Bridge
2 Rio Vista Bridge
3 Three Mile Slough Bridge
4 Collinsville
5 Vernalis
6 Mossdale Bridge
7 Clifton Court Ferry
8 East Contra Costa I D
9 Dutch Slough
10 Opposite Central Landing
11 Millers Harbor
12 Antioch
13 Pittsburg
14 O B A Ferry
15 Port Chicago
16 Innisfail Ferry
17 West Suisun
18 Martinez
19 Benicia
20 Crockett
21 Emmaton (opp Toland Landing)
22 Holland Tract
23 Webb Point
24 San Andreas Landing
25 Webb Pump
26 Oulton Point
27 Three Mile Slough, S J
28 Piper Slough
29 Webb Ferry
30 Jersey Island
Off Map Grandview
Off Map Point Davis
Off Map Point Pinole
Off Map Point Orient

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SACRAMENTO - SAN JOAQUIN WATER SUPERVISION

LINES OF SALINTY ENCROACHMENT
SACRAMENTO - SAN JOAQUIN DELTA AND UPPER BAYS

1955

Scale of miles

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING

SACRAMENTO–SAN JOAQUIN WATER SUPERVISION

1955

SCALE: 1" = 10 MILES

LEGEND

- POINTS OF DIVERSION
- SALINITY OBSERVATION STATIONS
- STREAM GAGING STATIONS
- DRAINAGE PUMPING PLANTS
- DIRECTION OF NET FLOW DURING TIDAL CYCLE MEASUREMENT
- TIDE GAGE STATIONS
- SACRAMENTO-SAN JOAQUIN DELTA AREA


NAPA
FAIRFIELD
JACKSON
SAN ANDREAS
SAN RAFAEL
MARTINEZ
STOCKTON
SONORA
OAKLAND
SAN FRANCISCO
MODESTO
REDWOOD CITY
SAN JOSE
MARIPOSA
MERCED
MADERA
FRESNO
HANFORD
VISALIA
TULARE LAKE BED
BAKERSFIELD
PACIFIC OCEAN

STATE OF CALIFORNIA
Department of Water Resources
Sacramento-San Joaquin Water Supervision

TABLE 219

1955 - ACREAGES OF IRRIGATED CROPS AND NONIRRIGATED AREAS
SACRAMENTO-SAN JOAQUIN DELTA SERVICE AREA

DELTA LOWLANDS

Island or Tract	Pasture		Al-	Rice	Field Crops					Truck Crops					Fruit	Grapes	Native Vegetation			Fallow	Idle	Duck	Total	Urban	Tule &	Levee	Inter-	Total	Total
	Sudan	Misc.	falfa		Beans	Corn & Milo	Grain & Hay	Peas	Safflower & Sunflower	Sugar Beets	Asparagus	Celery	Onions	Potatoes	Tomatoes	Misc.	& Nuts		Lush	Medium	Dry	& Bare Land	Crop Land		Agricultural		Swamp	& Berm	Water Surface	Non-Agricultural	
Andrus Island - R.D. Nos. 317. 407. 556		324	283			1174	1210			078	60				891	20	118			11					7001	203		462	15	680	7681
Atlas Tract				58			112								118										288	42		50	20	112	400
Bacon Island - R.D. No. 2028							375				2394	115	217	1990		58			28			26	51		5254	14		240	87	341	5595
Bethel Tract - R.D. No. 1619		710	112			443	1174									20			87	47	373	54			3020	260	4	136	91	491	3511
Bishop Tract - R.D. No. 2042		701				221	789			186					240										2077			105	9	114	2191
Boggs Tract - Portion of R.D. No. 404		221	105		83	9	290								163										941	321		81		402	1343
Bonnie Brae - R.D. No. 746																	110								110	5	5	18		28	138
Bouldin Island - R.D. No. 756						470	1260			152	1805	24		459	305	519				8		410			5452	71	57	372	64	564	6016
Brack Tract - R.D. No. 2033	200	1520	29			796	788			151	620			503						43		88			4667			162	26	188	4855
Bradford Island - R.D. No. 2059		852				858	175																		2016	35		109		144	2160
Brannan Island - R.D. No. 2067		67	367			3148	2517			97					606		211			324					7337	13		177	155	345	7682
Byron & Baird - R.D. 800		317	333			448	977				2107				390					36	960	30			5998	12		213	77	302	6300
Byron Tract - West of		20	13																		505	9			547			23	2	25	572
Canal Ranch		193				640	1800								151										2844			156	24	180	3024
Clifton Court Tract - R.D. No. 802			112			656	801		343		741				162						159				3074			137	46	183	3257
Coney Island		32				900														17					949			109		109	1058
Contra Costa Co. Water District																				32					32		304	23	786	1113	1145
Deadhorse Island						72				33					90										195			27		27	222
Decker Island						154	258													263					675						675
Drexler Tract			240	72			525				2108				62										3007	6		128		134	3141
Edinger-Johnson - R.D. No. 745		11				6				112							59								188	12		29	7	48	236
Egbert Tract - R.D. Nos. 536. 2084		729	517			184	3451			648	341		4		434					1458				59	7825	7	38	252	51	348	8173
Egbert Tract - W. & S. of		51																		412					463		108		18	126	589
Ehrhardt Club			119			320									43					8					490			44	55	99	589
Elmwood Tract							57				703												23		783		24	33		57	840
Empire Tract						838	493				1732			292								137			3492	13		164	14	191	3683
Fabian Tract		90	2150			88	547			308	1840				1004				39						6126			402	101	503	6629
Farmers Developed Land Co. - R.D. No. 2058		141	2252			143	363			21	290				1324		8			21					4589	16		227	200	443	5032
Farmers Developed Land Co. - Northwest of											120								25						145						145
Fay Island							78																		78			19		19	97
Fox Ranch			69		34	18	55																		176			12		12	188
Franks Tract		289																							289			177	3134	3311	3600
Glide - R. D. No. 765			314			31	407			338	32				26	29				9					1186	91		58	74	223	1409
Grand Island - R.D. No. 3		25	2144			6059	3050		185	1843	207		52		1204		1193	4			217		22		16205	80		533	59	672	16877
Hastings Tract - R.D. No. 2060		1329				37	1109			125	2105				335					1029				144	6811	6		339	83	428	7241
Hastings - Lower						137																			137			22		22	159
Hood & Vicinity		51	35			252	86			10							73								513	135		30		165	678
Holland Tract	43	897	86				455				2180									336	26				4023	21		166	49	236	4259
Honker Lake Tract			200			103	498				1223														2024	24		111	34	169	2193
Hotchkiss Tract	102	1651	124			143	329			19	147				49					134	321		46		3065	110		111	57	278	3343
Hotchkiss Tract - West of		436	173			93												52		85	67		36		512	24	128	69	875	1096	2008
Hotchkiss Tract - South of		338					9										28				30				405			22	10	32	437
Ida Island		56																							56	14				14	70
Jersey Island		1660				107	1298		115										118						3298			213	41	254	3552
Jones Tract (Upper)						419	84				5220			153									11		5867			161	335	496	6363
Jones Tract (Lower)							580				4926														5512			137	228	365	5877
King Island						108	68				2210	219		370											3035	11		137	51	199	3234
Liberty Reclamation District		74	204			1302	658			1514	441				985	708				20		62	93		6065	22	22	459	318	821	6886
Lisbon - R.D. No. 307		76	1107			301	1914		32	1531	102				401		7								5660	56		228	67	351	6011
Little Holland Tract						2408				127					91										2706		29	157	49	235	2941
Locke - R. D. No. 369		9	12				35										92			342					490	27		21	70	118	608
Mandeville Island							1399				2016			392						242					4949	36		255	58	349	5298
McCormack-Williamson Tract						255	603			331					349					20					1558			123	4	127	1685
McDonald Island (incl. Hastings Tr.)- R.D. 2030		25				743	967			285	1479	55	241	1560		19			16	269	7		14		5453	80		220	398	698	6151
Medford Island											1085														1085			125		125	1210
Merritt Island			490			750	664	97		1225	282				999	52	45						15		4036			269		269	4905
Mildred Island						111					720									34					865			134	7	141	1006
Moore Tract						218	940			17					115										1449		75	92	66	233	1682
Morning Ranch											55														355	19		12		31	386
New Hope Tract - R.D. No. 348	152	1389	84	670	26	1308	1387			68	1341				2078		66	29	64						9359	227		249	26	502	9861
New Hope Tract - Southwest of		125	47																						172	5				5	177
Orwood Highlands		32	247				20				39				82		50			402	13		16		1001	17		61	38	116	1717
Orwood Tract		326				188					1030						4				8				2156	35		111	85	231	2387
Palm Tract						121					1954								123		35				2233	11		159	103	273	2506
Paradise Cut		30	71			131					113				97					75					517	4			22	26	543
Pierson District		4	1334			2003	1053			1640					792	18	1070								8580	48		361		409	8989
Pocket, The (Roberts Island)		58					286				56				63								19		482			57		57	539
Pocket - R.D. No. 673	8	70	098			398	319			078	63		4		304	57	3			149			12	24	2792	36		115	120	271	3063
Prospect Island					183	1424	141			198					29				140						2120		28	170	134	332	2452
Quimby Island											588									116					704			110		110	814
Randall Island		6	19			10											356								391	3		26		29	420
Rio Blanco Tract		445					152						31												628			55		55	683
Ringe Tract		28				400	1021			217	3012	35		442						10			10		6431	21		243	102	366	6797
Roberts Island (Lower)		288	198			2302	2111		280	44	4242			278	312				32	96			44		10227	19		260	65	344	10571
Roberts Island (Middle)		275	2744			931	1887		30	129	4590				1173		25			10					11500	130		196	104	430	11930
Roberts Island (Upper)		65	1925			771	2408			10	648				1242		45		39						7353	9		277	7	293	7646
Rough and Ready Island																										1388		79		1467	1467
Ryer Island - R.D. 501			1549			4420	2142		529	2284					475		40			30					11475	10		405	110	525	12000
Sargent-Barnhart Tract		8				95	17				842				12										1133			86	14	100	1233
Sherman Island - R.D. 341		270	274			1 72	5333		95	548					1020				47	176	174				9895			473	82	555	10450
Shima Tract		204					135				972				288	62				111					1721			47	33	130	1851
Shima Tract - East of		407																							578			30		30	608
Sir Kee Tract		451		374			148																		973			36	15	51	1024
Smith Tract						172	218			140	333				15										928			55	2	57	985
															23		10	25							539			18	2	20	559

Shin Kee Tract		451		374			148																		578		36		30	608
Smith Tract						172	218			140	333			5											973		36	15	51	1024
State Farm		30	221			18	183							23		30	25								928		55	2	57	985
Staten Island			28			344	2200			878	1480			6						14					539		18	2	20	559
Stewart Tract - R.D. No. 2002			1,184			18	128			17	1308			312											8711	15	3	513	8	539	9250
Stockton Country Club		120																							3842	42		210	46	298	4140
Sutter Island			2			412	3			413				150		578									120			14		14	134
Terminous Tract		147		170		2174	15			117	1408	626	54	12						312					2394			193	18	211	2605
Twitchell Island		350	69			1227	1310		130	21				72						145		21			9904	64		302	186	557	10521
Tyler Island		7	458		66	306	4751			411				493	2	10				4	6	40			3357			218	52	270	3627
Union Island P.D. 1 & 2		60	4517			2055	4440		1138	906	9067			3242				28	24	8	33			8440	162		251	107	520	8960
Union Island - Southeast of P.D. 1			185			78	215							152										23798	12		675	304	991	24789
Vaale Tract		53	49			112					892									75	33		20		630			89	17	106	736
Venice Island						1995	311			110			25	84						6			140		1234			77	2	79	1313
Victoria Island						2982	1341				2549			100						93					2846			237	15	392	3238
Walnut Grove - R.D. No. 564			109			73	13			42						23						39			6758			254	252	511	7269
Webb Tract - R.D. No. 2028						1475	3206				591														444	44		89		188	637
West Sacramento - R.D. No. 900		37	2082			233	1740		5	192	145		12			67			703	63	14	48		5052			241	179	420	5472
Widdow Island						48																			8072	2443		373	430	3246	11318
Woodward Island						537	240				659			126						40		11			48			16		16	64
Wright Tract						238	510							328	102	18									1638	3		158	44	205	1843
Reclamation District No. 50																				54					1196			68	16	84	1280
Reclamation District No. 744			154			330	774			881	40			47		74							3274		54					3274	3328
Reclamation District No. 813		124	118			472	522			301				260		123					1	49			1475	47		74	5	126	1601
Reclamation District No. 999	1	5	4728		23	2185	3511			23			554	4316	686	24				21	134	40			20994	5		29	81	115	2209
Reclamation District No. 1002		2192	102	159		500	54			147				179	927	101				7	110	185	571		24220	243		674	853	1770	25990
Reclamation District No. 1002 - West of																									6413	25		87	46	158	6571
																												22	2	24	24
Totals	522	[a] 22475	34481	2103	420	[b] 38526	[c] 74709	97	[d] 2974	6181	80325	1083	1193	8539	30099	[e] 1192	[f] 5141	[g] 110	897	7891	3116	1300	1103	203	385743	6914	4239	16889	11042	39084	[h] 425427

Boundary of Delta revised in 1955. Survey was made during July, August, and September 1955 by personnel of the then Division of Water Resources. Acreages in nonagricultural uses such as urban, tules and swamp, levee and berm, and interior water surfaces were taken from 1952 U. S. Bureau of Reclamation Land Use Survey adjusted for changes between 1952 and 1955. Boundaries and locations of unidentified tracts or islands are delineated on maps on file with Department of Water Resources.

a Acreage includes mixed grass 14,604, clover 370, and native 2,501.
b Acreage includes corn 47,557 and milo 20,972.
c Acreage includes barley 50,108, wheat 19,255, oats 795, rye 994, grain hay 2,090, wild hay 93, clover hay 46, and grain and vetch 60.
d Acreage includes sunflower 2,204 and safflower 770.
e Acreage includes green beans 1,009, seed 830, turnips 2, table beets 120, bushberries 2, cucumbers 265, carrots 228, sweet corn 516, eggplant 18, lettuce 75, peppers 5, green peas 13, squash 18, mixed garden 14, and nursery 20.
f Acreage includes pears 4,645, apricots 51, cherries 2, peaches 31, prunes 51, home orchard 4, almonds 17, and walnuts 140.
g Acreage includes table grapes 25 and wine grapes 85.
h Total does not include 35,663 acres (34,30 lowlands, 1,357 uplands) of water surface, or 7,544 acres (7,500 lowlands, 44 uplands) of small islands within open or controlled tidal channels outside of boundaries of tracts and islands but within the outer boundaries of the Delta and below the lowest gaging stations.

1 The following table shows nonagricultural areas within the Delta Lowlands which are not included in the main table above. The figures for tule and swamp (790) and levee and berm (14), and interior water surface (644) are included in the figures for small islands and water surfaces respectively, footnote h, and represent a partial identification of these items.

	Tule and Swamp	Levee and Berm	Interior Water Surface	Total
Acker Island	51			51
Donlan Island			271	271
Fern Island	126			126
Headreach Island	177			177
Hog Island	180			180
Kimuall Island			213	213
Rhode Island	71	14		85
Spud Island	115			115
Tule Island	70			70
West Island			160	160
	790	14	644	1448

DELTA UPLANDS

Island or Tract	Pasture	Alfalfa	Rice	Field Crops: Beans	Corn & Milo	Grain & Hay	Safflower & Sunflower	Sugar Beets	Truck Crops: Asparagus	Tomatoes	Misc.	Fruit and Nuts: Almonds	Apricots	Peaches	Walnuts	Misc.	Grapes	Native Vegetation: Lush	Medium	Dry	Fallow & Bare Land	Idle Crop Land	Duck Ponds	Total Agricultural	Urban	Tule & Swamp	Levee & Berm	Interior Water Surface	Total Non-Agricultural	Total
Banta Carbona Contract	752	811			2[illegible]	403		252		103										494				3148	62		96	29	187	3335
Banta Carbona Irrigation District	250	4687		1,82	12,7	272	10	577		2542	760	683	874		451	40				1187		6		[j] 14994	451		42	139	632	15626
Bishop Highlands and Terminous Tract	4020		35		65	157				91					0			153		1187		109		5823	33		21	0	54	5877
Irrigated by wells	[illegible]		84																					463						463
Boggs Tract - Reclamation District 404																								0	1348		26	0	1374	1374
Byron Bethany Irrigation District	3274	4450		108	42	1111		178		254	279	499	531		517	20				5433	174	42		17239	722		24	0	746	17985
Canal Ranch	278																							278			12	0	12	290
Contra Costa Co. Water District												157	19		32		186			93				487	20			0	20	507
E. Contra Costa Co. I. D. and Vicinity	328	1331		1'1	[illegible]	731		223	43	1176	1127	5124	2880	940	3053	[illegible]	387			1112		197		20203	841	51	8	158	1058	21301
Irrigated by wells	24											y	42											75						75
Fink and Windeler Tract	6	264			33	216		38		30	47									16				650	42		67	0	109	759
Fremont Irrigation Association	21	401			21	25		20		223														711	3		10	0	13	724
French Camp	50	19	184	16	28	124			61	73	7				5					296	130	6		999	986	50	26	0	1062	2061
Irrigated by wells	21			18					19		13													71						71
Hastings and Egbert Tracts	118	4			33	648														5830				6683	68	21	49	189	327	7080
Irrigated by wells	80																							80						80
Herdlyn and Vicinity	813	379			14			44				129			3					574		68		2034	102	13	100	28	309	2343
Holly Sugar Co.	68	155			276	119		137												78				833	111		13	8	132	965
Independent Mutual Water Company	21	410			12	115		37	300	308														1209			48	6	54	1323
Maine Prairie and Moore Tracts	2098				174	74		52												2083				4477	4		150	20	174	4651
March Garden and Brookside Ranch		33		27		47		31		48												69		255	74		24	0	98	353
Irrigated by wells	6			35	12					14	11				25									103						103
Mossdale Br. to Delta Mendota Intake	59	163				111			100													133		[k] 617	514		52	11	582	1199
Mossdale to Vernalis	137	1040		73	55	254		56	1061	306	91				19					798	192	98		4676	1247		193	218	1658	6334
Irrigated by wells	141	1063		153	535	24		304		811	122	56												3409						3409
Naglee Burke Irrigation District	1518	1240			7	2				54										262				3083	30	7	57	19	113	3196
New Hope and Brack Tracts	3087	5	89		234	33				171						16		35		1561		62		5223	22		55	8	85	5308
Irrigated by wells	210																							210						210
Paradise Mutual Water Company	20	271			114	42		42	339											52				886	3		[illegible]	6	18	904
Sacramento to Hood	33	118			444	644		128		30										2700		55		4202	130		26	248	404	4606
Irrigated by wells	135	24			131																			290						290
State Farm						[illegible]					22									7		55		179	133		0	133	312
Irrigated by wells	75	47		4	93					9														228						228
Stockton and Vicinity	144				40	105														694		16		959	3985		130	0	4115	5114
Irrigated by wells	38	18		21	19																			96						96
Tracy Clover Irrigation District	17					32														443		8		500	155		0	155	655
Irrigated by wells	106	257				31				78														492						492
Westside Irrigation District	1518	4473		232	975	887		612		1373	113	723	46	71	61	41				232		24		11401	1164		14	3	1181	12582
Yolo By-Pass - S.P.R.R. to R.D. 2076	153		1762		[illegible]	42 9	1853	384		400									1202	368		62		12854	211		212	424	11277
Irrigated by wells					303			40		72														475						475
Reclamation District No. 17	1063	1793		207	4.	766		75	218	767	247	4			90		67			317	45	2		5710	134		331	0	470	6180
Irrigated by wells	154	313			95	1		52	108	62	22													828						828
Reclamation District No. 535	34	25			40	[illegible]		46		46												11		495	74		50	33	157	652
Irrigated by wells	57	88		61	55			35		98														344						344
Reclamation District No. 536						211														332				543			10	0	10	553
Reclamation District No. 824	19	20				80		70		215														410	33		50	0	83	493
R. D. No. 1002 - S.E. of & E. of R.D. No. 813	573	143	1147		1301	924	84	568		248									100	2021		682		7857	132		31	401	564	8421
Irrigated by wells	107	7			12																			186						186
Reclamation District No. 1609	12	244	361		255	192	21	33	130	245	5								70			12		1680	12		128	46	186	1866
Reclamation District No. 2058	772	1900		86		141				292														3231	56		150	0	206	3437
Reclamation District No. 2064	245	50			114	211		71		173										198				1062	26		71	34	131	1193
Irrigated by wells					74																			74						74
Reclamation District No. 2068	11720	78			378	[illegible]		184		157										1377	104	85	129	14478	11		70	55	1	15112
Reclamation District No. 2075	150	1171		93		16		84		222										581				2317	22		140	89	251	2568
Reclamation District No. 2076	5003				2458	1616	675													[illegible]	5		378	1113	17075	121		67	44	232	17347
Irrigated by wells	111																							204	315					315
Sub Totals - Irrigated by surface diversion	38377	25978	1578	2999	12236	15926	2242	3907	2378	9007	2994	7124	4350	1011	4257	681	656	207	1478	34927	645	2110	1242	[m] 179959	13172	192	2356	2004	17724	197683
Irrigated by wells	1704	1817	84	492	1393	13	4	431	127	1104	1 [illegible]	5	4	0	25	1	0	0	0	0	0	0	244	7789	0	0	0	0	0	7789
Grand Totals	[n] 40141	27795	1662	3491	[p] 14629	[q] 15939	[r] 2249	4338	2505	10711	[s] 2862	389	4342	1011	4282	[t] 681	[u] 656	207	1478	34927	645	2110	1242	[m] 187748	13172	192	2356	2004	17724	[v] 205472

Boundary of Delta revised in 1955. Survey was made September, October, and November 1955 by personnel of the then Division of Water Resources. Acreages in nonagricultural uses such as urban, tules and swamp, levee and berm, and interior water surfaces were taken from 1952 U. S. Bureau of Reclamation Land Use Survey adjusted for changes between 1952 and 1955. Boundaries and locations of unidentified tracts or islands are delineated on maps on file with Department of Water Resources.

Areas of crops irrigated from wells are shown on a second line. These areas are not included in the first line of figures shown for the tracts.

j Total includes 251 acres of nonsegregated crops.
k Total includes 491 acres of nonsegregated crops.
m Total includes 742 acres of nonsegregated crops.
n Acreage includes mixed grass 33,141, clover 3,772, native 2,707, and sudan 469.
p Acreage includes corn 4,455 and milo 9,174.
q Acreage includes barley 11,44 , wheat 686, oats 1,454, flax 20, grain ha, 415, and wild hay 27.
r Acreage includes safflower .,[illegible] and sunflower 10.
s Acreage includes green beans 60, bushberries 14, broccoli 253, cucumbers 23, carrots 114, celery 34, sweet corn 430, lettuce 410, cusabe honey daws 349, watermelon 1[illegible], onions 24, peppers 13, green peas 345, squash 49, cabbage 22, okra 10, nursery 36, and nonsegregated 346.
t Acreage includes cherries 347, plums 137, and nonsegregated 197.
u Acreage includes table grapes 43 and wine grapes 613.
v Total does not include 1,357 acres of water surface or 44 acres of small islands, both items occurring within open or controlled tidal channels outside of boundaries of tracts and islands but within the outer boundaries of the Delta and below the lowest gaging stations. These amounts have been included in footnote h.