STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING

REPORT ON

WATERMASTER SERVICE

IN

NORTHERN CALIFORNIA

1959 SEASON

EDMUND G. BROWN
GOVERNOR

WILLIAM E. WARNE
DIRECTOR OF WATER RESOURCES

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STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

EDMUND G. BROWN, Governor
WILLIAM E. WARNE, Director of Water Resources
ALFRED R. GOLZE, Chief Engineer

DIVISION OF RESOURCES PLANNING

William L. Berry . . . . . Division Engineer
John M. Haley. . . . . Chief, Project Development Branch

The investigation leading to this report
was conducted under the direction
of

Wayne MacRostie . . . Chief, Special Investigations Section

by

Orville L. Abbott . . . . Senior Engineer, Water Resources

Assisted by

Paul Art . . . . . Associate Engineer, Water Resources
Marvin Bruce . . . . . Assistant Civil Engineer
William Collord. . . . . Assistant Civil Engineer
William Holderman. . . . . Assistant Civil Engineer
Robert Lounsbury . . . . . Assistant Civil Engineer
Floyd McFadin. . . . . Assistant Civil Engineer
Joe Nessler. . . . . Assistant Civil Engineer
Gerald Shell . . . . . Assistant Civil Engineer
Jan L. Warnshuis . . . . . Assistant Civil Engineer
Vernon Willshon. . . . . Assistant Civil Engineer

CHAPTER I. INTRODUCTION

Distribution of water in watermaster service areas is provided for in Part IV, Division 2, of the Water Code which provides for the creation of watermaster service areas and the appointment of watermasters by the Department of Water Resources if the necessity therefor exists. As of December 30, 1959, eighteen watermaster service areas had been created, two of which were for ground water basins in Southern California, and sixteen of which were for the distribution of surface waters on streams of Northern California.

The first watermaster service areas in Northern California were created in September 1929. The latest service area was established in April 1959. Following the creation of each service area, watermaster service was provided continuously therein and a separate report prepared annually until 1960 for each area by the department.

This report covers water distribution in watermaster service areas of Northern California during the 1959 irrigation season, from March 15 to October 1. It is the first report to combine descriptions of water distribution in all of the 16 watermaster service areas in that part of the state.

The locations of watermaster service areas discussed in this report are shown on Plate 1, "Watermaster Service Areas in Northern California". Distribution of water in these areas is governed largely by decrees which will be discussed later in this report.

This report is presented in four chapters as follows: Introduction; Water Supply; Distribution of Water; and Changes in Ownership of Lands and Water Rights.

CHAPTER II. WATER SUPPLY

The seasonal amount and monthly distribution of precipitation are basic factors which influence the runoff in the watermaster service areas. Monthly distribution is particularly important where direct runoff from precipitation is a significant part of the total water supply.

Monthly precipitation during the 1958-59 water year at 16 stations in the watermaster service areas is presented in Tables A-1 through A-16. A summary of the records for these stations is given in Table 1.

TABLE 1

SUMMARY OF 1958-59 PRECIPITATION DATA

Station	Mean precipitation (In inches)	1958-59 precipitation (In inches)	Percent of mean
Bieber, Lassen County	16.23	13.20	81
Hat Creek Powerhouse No. 1, Shasta County	17.23	13.15	76
Chico, Butte County	24.22	20.07	83
Redding, Shasta County	37.40	29.43	79
Greenville, Plumas County	40.95	30.84	75
Vinton, Plumas County	10.63	8.74	82
Alturas, Modoc County	12.53	9.02	72
Happy Camp, Siskiyou County	45.77	47.38	104
Fort Jones, Siskiyou County	20.86	13.94	67
Yreka, Siskiyou County	17.22	10.30	60
Jess Valley, Modoc County	16.86	11.76	70
Lake City, Modoc County	19.46	12.20	63
Cedarville, Modoc County	12.37	9.10	73
Susanville Airport, Lassen County	15.31	9.74	63
Sierraville, Sierra County	23.81	20.16	83
Lakeview, Oregon	14.25	10.55	72

The principal factor determining water supplies available to most of the Northern California watermaster service areas during any particular irrigation season is the water content of the snow pack in the tributary watersheds at the beginning of the season. Measurements of this water content at various snow courses are made during each winter and spring by personnel of the department and other interested public agencies.

General information and snow pack data for 1959 pertaining to a number of representative snow courses in seven of these areas are presented in Table 2. The water content of the snow pack in each course on April 1, 1959 is shown in inches and in percent of the estimated 50-year mean water content on April 1. It can be seen that the snow pack on April 1, 1959 was well below average in all of the areas except some of those in the Shasta River Watermaster Service Area.

TABLE 2

GENERAL INFORMATION AND 1959 DATA FOR REPRESENTATIVE SNOW COURSES

Watermaster service area	Snow course	Elevation in feet	April 1 water content of snow in inches: 50-year computed mean	April 1 water content of snow in inches: 1959	1959 water content in percent of mean
Indian Creek					
	Mount Deyer	7,400	25.8	18.5	72
North Fork Pit River					
	Eagle Peak	7,200	16.2	9.1	56
	Blue Lake Ranch	7,300	11.3	5.7	50
	Cedar Pass	7,100	17.0	7.6	45
Middle Fork Feather River					
	Independence Lake	8,400	45.4	29.4	65
	Yuba Pass	6,700	35.1	18.5	53
Shasta River					
	Parks Creek	6,900	33.7	36.3	108
	Sweetwater	5,900	14.4	15.9	110
	North Fork Sacramento	6,800	22.7	21.9	96
	Mount Shasta	7,900	52.6	46.2	88
	Little Shasta	6,200	26.4	9.5	36
South Fork Pit River					
	Cedar Pass	7,100	17.0	7.6	45
	Eagle Peak	7,200	16.2	9.1	56
	Blue Lake Ranch	7,300	11.3	5.7	50
	Adin Mountain	6,350	14.0	7.4	53
Surprise Valley					
	Eagle Peak	7,200	16.2	9.1	56
	Blue Lake Ranch	7,300	11.3	5.7	50
	Cedar Pass	7,100	17.0	7.6	45

TABLE 2 (cont'd.)

Watermaster service area	Snow course	Elevation in feet	April 1 water content of snow in inches: 50-year computed mean	April 1 water content of snow in inches: 1959	1959 water content in percent of mean
Susan River					
	Silver Lake	6,450	30.7	23.1	75
	Fredonyer Pass #1	5,600	9.9	2.2	22
	Norvel Flat	5,700	16.5	11.0	67

Runoff from direct precipitation and from melting snow is measured at a number of locations in and near the watermaster service areas of Northern California. This work is accomplished in part by the department and in part by the United States Geological Survey. Complete records from such measurements and other hydrographic data are contained in Appendix B. Some of the individual stations and records are discussed in more detail in the following chapter.

Table 3 contains data obtained from the "Water Conditions in California as of May 1, 1961", Department of Water Resources on the runoff for key stations in or near the watermaster service areas.

TABLE 3

SUMMARY OF 1959 RUNOFF DATA

Station	Runoff April 1 to June 30 in thousands of acre-feet: Mean	1959	Runoff April 1 to June 30 in percent of mean
Inflow to Shasta Lake	1,817	1,383	76
South Fork Pit River near Likely	40	15	38
Middle Fork Feather River near Clio	88	20	23
Feather River at Oroville	1,982	1,009	51

The subnormal snow pack on April 1, 1959, combined with unseasonably warm and dry weather in April, produced one of the poorest water supply years in terms of irrigation season runoff since watermaster service was initiated. Stream flow was particularly lacking in areas where no reservoir storage existed. A relatively large carryover of stored water from the 1958 season prevented more severe shortages in the areas where storage was available.

CHAPTER III. DISTRIBUTION OF WATER

Available water supplies are distributed in the various watermaster service areas in accordance with quantities and priorities of recognized water rights. Most of these rights are defined in the decrees entered by the Superior Courts of the counties in which the stream systems are located. Table 4 lists the decree numbers in the respective county Superior Courts under which the water in each stream system is distributed, the dates on which the watermaster service areas were created and other pertinent information.

Problems encountered in distribution of water during 1959, quantities of stream flow and diversions during that year, and descriptions of newly-constructed diversion systems and measuring devices in each service area, are discussed below.

Ash Creek Service Area

Distribution of water from Ash Creek during the 1959 season followed the methods and practices initiated in past seasons with little or no modifications. Shortages of both irrigation and stock water occurred on this stream throughout the 1959 season. Irrigation commenced early in April with approximately 70 percent of total allotments available. Water users from Butte Creek experienced the most severe shortages. By the end of July, there was insufficient water supply to provide stock water in the lower reaches of this stream, necessitating pumping from wells by the "lower users" for this purpose.

TABLE 4

SUPERIOR COURT DECREES REGULATING WATER DISTRIBUTION AND DATES WATERMASTER SERVICE AREAS CREATED

Watermaster service area	Name of stream system	County	Decree number	Date watermaster service area created	Remarks
Ash Creek	Ash Creek	Modoc and Lassen	3670	4/3/59	Included in Big Valley service area 1949 through 1959
Big Valley	Pit River	Modoc and Lassen	6395	11/13/34	Service area operated under agreement 1934 through 1959
Burney Creek	Burney Creek	Shasta	5111	9/11/29	Service area amended through 3/28/42
Butte Creek	Butte Creek	Butte	18917	1/7/43	
Cow Creek	North Cow Creek	Shasta	5804	10/17/32	Service area amended 1/21/38
	Oak Run Creek	Shasta	5701	10/17/32	Service area amended 1/21/38
	Clover Creek	Shasta	6904	10/17/32	Service area amended 1/21/38
Hat Creek	Hat Creek	Shasta	(5724 (7858	9/11/29 9/11/29	Service area amended 2/26/42
Indian Creek	Indian Creek	Plumas	4185	2/19/51	Service area amended 3/16/60

TABLE 4 (cont'd.)

Watermaster service area	Name of stream system	County	Decree number	Date watermaster service area created	Remarks
Middle Fork Feather River	Middle Fork Feather River	Plumas and Sierra	3095	3/29/40	Service area amended 2/26/40 and 2/25/57
North Fork Cottonwood Creek	North Fork Cottonwood Creek	Shasta	5479	9/11/29	Service area amended 1/16/40 and 2/7/49
North Fork Pit River	North Fork Pit River and all tributaries except Franklin Creek	Modoc	4074	12/31/40	
	New Pine Creek	Modoc	2821	12/31/40	
	Cottonwood Creek	Modoc	2344	12/31/40	
	Davis Creek	Modoc	2783	12/31/40	
	Franklin Creek	Modoc	3118	12/31/40	
Seiad Creek	Seiad Creek	Siskiyou	13774	11/6/50	
Shackleford Creek	Shackleford Creek	Siskiyou	13775	11/6/50	
Shasta River	Shasta River	Siskiyou	7035	3/1/33	
South Fork Pit River	South Fork Pit River	Modoc and Lassen	3273	12/31/34	
	Pine Creek		Agreement	12/31/34	
	Pit River in Hot Springs Valley		Agreement	12/31/34	

TABLE 4 (cont'd.)

Watermaster service area	Name of stream system	County	Decree number	Date watermaster service area created	Remarks
Surprise Valley	Mill Creek	Modoc	3024	1/10/39	Service area
	Soldier Creek	Modoc	2405	1/10/39	amended 12/31/41
	Pine Creek	Modoc	3391	1/10/39	
	Cedar Creek	Modoc	1206	1/10/39	
		Modoc	2343	1/10/39	
	Deep Creek	Modoc	3101	1/10/39	
	Owl Creek	Modoc	2401	1/10/39	
	Rader Creek	Modoc	3626	1/10/39	
	Eagle Creek	Modoc	3284	1/10/39	
	Emerson Creek	Modoc	2840	1/10/39	
Susan River	Susan River	Lassen	4573	11/10/41	Service area
	Baxter Creek	Lassen	8174	2/16/56	amended 2/16/56
	Parker Creek	Lassen	8175	2/16/56	

Big Valley Service Area

The extremely short spring runoff noticeably affected the distribution of water in Big Valley due to its dependence on the return flow from irrigation in the Hot Springs Valley. The first distribution problem occurred on about April 15, when the users in Hot Springs Valley began to irrigate. This reduced the flow in the Pit River at the head of Big Valley to approximately 25 second-feet. This situation, together with the unseasonably warm weather made it necessary to discontinue all irrigation from the natural flow of the Pit River and use the entire flow for the maintenance of storage behind river dams and to provide stock water in accord with first priority allotments. Water was again available for irrigation on about May 1, and was sufficient to satisfy such requirements until June 10.

On about June 20, it was necessary for the shareholders in the Big Valley Mutual Water Company to release water from Roberts Reservoir to complete the irrigation of their lands prior to haying operations. These operations commenced about June 25 and ended on July 20, when the shareholders again released water from Roberts Reservoir for irrigation of their lands.

From June 10 to August 15, no water was available for wild-type flood irrigation from the natural flow of the Pit River. From August 15 to August 25, there was an adequate supply to satisfy the demand of all second priority users except the McArthur and Britten Ranches. On September 15

the flow increased sufficiently to satisfy the allotments of the second priority rights.

The amounts of water released from Roberts Reservoir and used by each shareholder in the Big Valley Mutual Water Company are shown in Table 5.

TABLE 5

USERS OF WATER FROM ROBERTS RESERVOIR - 1959

Name of shareholder	Number of shares	Amount of water in acre-feet
Lester Babcock	3	220
Clarence Hawkins	1	99
Oral Gerig	3	300
Peter Gerig	5	380
W. H. Hunt Estate Company	2	210
Merlin Kennedy	1	100
Ward Kramer	2	160
Cyril R. Mamath	1	90
Lewis Monchamp	1	--
TOTALS	20	1,659[a]

[a] Does not include water released for Lewis Monchamp.

Records of daily mean releases from Roberts Reservoir are presented in Table B-3 and are shown graphically on Plate 2, "Hydrographs of Pit River near Canby and Roberts Reservoir Releases, 1959 Season".

The computed values of daily mean discharge of Pit River near Canby during 1959 are presented in Table B-1, and are also shown graphically on Plate 2. Precipitation data for the Big Valley area are shown in Table A-2.

Several irrigation system changes were made in the Big Valley area during 1959. A new diversion, consisting of a pump and concrete box, was installed at the head of the Oilar Ditch. The pump will be used when the water level behind Lookout Dam is too low to allow gravity diversion. A new dam was constructed in Three Corner Slough to irrigate the lower portion of the Hayes Ranch.

Burney Creek Service Area

The distribution of water from Burney Creek was carried out on a continuous flow basis throughout the season. All the diversions from Burney Creek were in operation except the Cayton Ditch which has been abandoned. The water formerly carried in that ditch is now delivered to the Elling Ranch through the Elling Town Ditch.

The water supply available for distribution, which is determined by addition of all diversions from the creek, was sufficient to supply all allotments until about May 25. The flow then gradually declined until it reached a low of 30 percent of allotments during the latter part of July where it remained nearly constant for the remainder of the season.

Butte Creek Service Area

The water supply on Butte Creek was below normal throughout the 1959 season, reflecting the below-normal precipitation during the winter months.

Foreign water diverted into Butte Creek from the Feather River is diverted into the Parrott Ditch together with the natural flow allotment to that ditch. The foreign water, which passes through DeSabla Reservoir and Powerplant to supply peak power demands, causes wide fluctuations in the flow of Butte Creek, especially when the creek is low. According to the "Memorandum and Order", which was entered on May 10, 1949 by the Superior Court of Butte County, the water users below Parrott Dam must be provided their natural flow allotments at all times without undue fluctuation caused by intermittent presence of foreign water. During 1959, this condition was met by regulation of Parrott Dam.

Water stage recorders, to aid in the distribution of water from Butte Creek, were maintained on Compton-Entler Ditch, Marybill Ditch, Durham Colony Ditch, Dayton Ditch at Edgar Slough, and Parrott Ditch. The Pacific Gas and Electric Company maintains a record of flow of the Hendricks Canal. The records of daily mean discharge for the most significant of these stations are presented in Tables B-6 through B-9. Precipitation data for the Chico station for the Butte Creek area, are shown in Table A-3.

Cow Creek Service Area

Water supply was sufficient to supply all allotments from Cow Creek until about the end of June 1959. During the month of July, a sharp reduction in the supply occurred and by the end of the month, the supply available was approximately 20 percent of the allotments. During the month of August the supply remained at the same level as it had been in July. Early in September, the supply increased to 40 percent of allotments where it remained until the end of the irrigation season.

On July 8 it was necessary to shut off the pump diverting water to the Ira J. Thorne Ranch. Water is diverted to this ranch under Application No. 11581, Permit No. 7066.

Cedar Creek. After June 1 the water supply in Cedar Creek was sufficient to supply only stock water. For the three-week period July 23 - August 15 Cedar Creek was completely dry below Round Mountain during which no stock water was available for the Greenwald Ranch.

Clover Creek. Regulation was required on Clover Creek with allotments available ranging from 100 percent at the beginning of the season to 80 percent by July. From July to the end of the season the supply remained fairly constant.

Oak Run Creek. Sufficient water was available to supply all first and second priority allotments for the entire irrigation season.

Hat Creek Service Area

Rotation of diversions from Hat Creek was initiated on May 1, 1959, commencing with the upper users. One hundred percent of allotments were available until the end of June. At this time the available supply began decreasing steadily until it reached a low for the season of approximately 70 percent during July. During August and September the flow remained constant throughout the remainder of the season.

The available supply in Hat Creek is measured at a United States Geological Survey gaging station. Data on daily mean discharges at this station are presented in Table B-4.

Indian Creek Service Area

Distribution of water in the Indian Creek Service Area during the 1959 irrigation season followed the practices initiated in past seasons.

Automatic water stage recorders were operated on Wolf Creek, Lights Creek and Indian Creek, the principal streams in the area, by personnel of the department.

Wolf Creek. The water supply of Wolf Creek during the season was sufficient to supply all demands until about the middle of June. During the following one and a half months, the water supply gradually diminished until by the end of July the third priority allotments were receiving no water and second priority users were receiving only 50 percent of allotments. The Posch and Fredrickson Ranches continued to use the pump which had been installed during the 1958 season.

During the latter part of the irrigation season, the flow of Williams Creek was sufficient to supply only stock water to the Dodge Ranch.

Lights Creek. The flow of Lights Creek was adequate to supply all demands through May. Thereafter the flow gradually decreased until by the end of June the supply was sufficient only for irrigation allotments to the Freeman-Bates and DeFanti-Smith Ditches. By the end of July, water was available above the county road for only the Freeman-Bates Ditch. Close regulation of these diversions was required throughout the remainder of the season. Although proper distribution procedures were followed, water did not reach the DeFanti-Smith Ditch. Below the county road, stock water was maintained throughout the season to the Peter-Lower Ditch. The Burns diversion was not used during the 1959 season.

Indian Creek in Indian Valley. The water supply of Indian Creek was sufficient to supply all allotments until about the middle of June. A more than adequate supply was available to the users below the Mill Race Ditch until the temporary diversion dam for that ditch was installed late in June. The Mill Race Ditch users stopped the leakage through this diversion dam near the end of July and for the remainder of the season the downstream diversions were supplied mainly by return flow from the upper ranches.

Middle Fork Feather River Service Area

Water supply in this area was well below normal during 1959. The snow packs at two snow courses, Independence Lake and Yuba Pass, as of April 1 were 65 and 53 percent, respectively.

Automatic water stage recorders were maintained by the department on Last Chance Creek at Guidici's, Smithneck Creek above Diversions, Webber Creek below junction with Gold Creek, Miller Creek above Forks, and Middle Fork Feather River at Portola.

Recorders were also maintained on the Little Truckee Ditch, Smithneck Creek at Lewis Mill, and the Scolari Pump Ditch.

The daily mean discharge of Last Chance Creek above Guidici's represents the total water available for distribution from that stream. In the fall of 1958 this station was moved a short distance upstream to a point above Diversion No. 21. It is no longer necessary to adjust the record by the amount of water being diverted into Diversion No. 21.

Last Chance Creek. There was sufficient flow in this creek to supply all demands until April 5 when distribution of water was limited to first, second and third priority users. By May 1, the flow consisted mainly of return flow into the East Channel. By June 1 the supply available was sufficient to meet only the demands of the first priority users and shortly after that rotation was discontinued.

Smithneck Creek. On March 23, water was available to supply all first priority demands and about 33 percent of the second priority allotments. The supply remained fairly constant throughout the spring months with the exception of the latter part of May when heavy precipitation increased the flow to allow satisfaction of all allotments for three or four days. A strict 14-day rotation of diversions was maintained until the latter part of June at which time the entire flow of the stream was required to supply first priority rights above Loyalton.

The inadequacy of the upper diversion structure, located near the town of Loyalton, made proper distribution difficult. However, during the fall a reinforced concrete structure was installed in accordance with specifications supplied by the watermaster.

West Side Canal Group. The West Side Canal Group consists of Hamlin, Miller and Turner Creeks. The water supply in these streams was sufficient to meet all demands until about the middle of June, after which regulation was required on all three creeks and on the West Side Canal. Rotation was practiced on Turner Creek below the highway from July 1 until the latter part of September. Stock water was maintained throughout the Turner Creek channel during the entire season.

Water users along the West Side Canal replaced or repaired structures to facilitate proper distribution of

water. As a result, it was possible for the first time in several years to maintain stock water in the lower end of the channel throughout the season.

Fletcher Creek and Spring Channels. Water from these sources was distributed on a continuous flow basis and was adequate to supply all demands until about June 1. The water supply gradually decreased thereafter until by the middle of August some difficulty was encountered in delivering stock water to the Marcus Ranch. The poor condition of the channel through the Taylor Ranch contributed to the difficulty.

Problems encountered by the Sierra County Water Works District No. 1 in selling their previously authorized bond issue delayed construction of a new water system. The district is presently attempting to obtain financial aid through the Davis-Grunsky Act. The increasing inadequacy of the existing system caused some users in the town of Calpine to be without domestic water at intervals during the season.

Little Truckee Ditch. The Sierra Valley Water Company imported a total of 6,500 acre-feet of water into Sierra Valley through the Little Truckee Ditch from April 15 to August 16. Water was distributed to the shareholders in accordance with their shares, as set forth in Schedule 9 of the Middle Fork Feather River Decree.

A concrete Parshall flume and float-operated drum-gate spillway were installed in the Little Truckee Ditch near the diversion dam. The work, ordered by the District Court

of the United States in Decree No. 5597 entered October 24, 1958, was started during the latter part of September and completed in October.

Webber Creek Tributaries. Most of the water users on Webber Creek have shares in the Sierra Valley Water Company and received Little Truckee River water after April 15 to supplement their supply from Webber Creek. Close regulation was necessary about the middle of July to maintain stock water from that time through August. By September the supply became inadequate to furnish stock water and the users had to depend on wells.

The Sierraville Public Utility District completed a system to provide domestic water and fire protection in the town of Sierraville. A number of sections of leaky plastic pipe will need replacing before this system is entirely satisfactory.

The district has filed two applications to appropriate water to supplement the rights assigned the district in 1958. The first is for 16,000 gallons per day to replace the right presently held by the United States Forest Service. The second application is for 0.40 second-foot to allow for future expansion of the system. Both applications are for diversion from Railroad Spring. If and when a permit is granted for the 16,000 gallons per day, the Forest Service has agreed to abandon its right.

North Fork Cottonwood Creek Service Area

Water distribution in this service area involves regulation of Moon Creek, Jerusalem Creek, and the main stream of North Fork Cottonwood Creek. In addition to regulating North Fork Cottonwood Creek it is customary for the watermaster to check, at regular intervals, the amount of water released from storage in the Misselbeck Reservoir into North Fork Cottonwood Creek for downstream rediversion. The Happy Valley Water Company, owner of Misselbeck Reservoir, has constructed measuring flumes on North Fork Cottonwood Creek above the reservoir and on Moon Creek, which joins North Fork Cottonwood Creek between Misselbeck Dam and the point of rediversion. The summation of the flow through the two flumes is considered to be the natural flow available for distribution to the North Fork Cottonwood Creek users as shown in the decree.

The water supply during 1959 was sufficient to supply all allotments throughout the season. The daily mean discharge of North Fork Cottonwood Creek near Igo is shown in Table B-12.

North Fork Pit River Service Area

Stream gaging stations equipped with water stage recorders were maintained at a number of points in the North Fork Pit River Service Area during 1959. The location and type of control for each are shown in Table 6.

TABLE 6

RECORDER STATIONS IN NORTH FORK PIT RIVER
WATERMASTER SERVICE AREA - 1959

Station	Control
New Pine Creek below Schroeder's	rated section
Cottonwood Creek below Larkin Garden Ditch	rated section
Davis Creek at Old Fish Wheel	rated section
Linville Creek above Renner House Ditch	2-foot rectangular weir
Franklin Creek above Diversions	4-foot rectangular weir
Joseph Creek below Couch Creek	rated section
Thoms Creek at Alturas-Cedarville Highway	rated section
Gleason Creek near Jones Ranch	3-foot rectangular weir
Parker Creek at Fogarty Ranch	rated section
Shields Creek below Pepperdine Ranch	6-foot rectangular weir
Parker Creek above Highway 395	rated section
North Fork Pit River below Thoms Creek	rated section

Records of the daily mean discharge at these stations are presented in Tables B-16 through B-29, except Tables B-19 and B-26.

New Pine Creek. Water was available for third priority allotments on this creek until the first part of July. By the middle of September the flow had decreased to a level such that only 26 percent of allotments for the second priority rights could be delivered.

Cottonwood Creek. The flow of Cottonwood Creek was sufficient to satisfy the first, second and third priority rights until June 10. The flow then decreased rapidly until July 30, at which time the creek became dry. On September 19, a small amount of water became available for the Bissell diversion.

Davis Creek. The flow of Davis Creek was sufficient to supply all allotments until the latter part of June, after which it decreased steadily until mid-July, when sufficient flow was available for first and second priority rights. This condition continued through the remainder of the season.

Linville Creek. The weir at the old powerhouse on Linville Creek was first measured on April 27 to determine the water supply available for distribution. Thereafter, weekly observations were made throughout the season.

Water was available for all allotments until about the middle of May. The stream flow decreased until the latter part of June when water was available for approximately 60 percent of first priority users. This flow continued to be available for the remainder of the season.

Franklin Creek. At the beginning of the season, water was available in this stream for about 15 percent of third priority rights. It gradually decreased throughout the season to a low of about three percent of third priority rights by the middle of September.

Joseph Creek. During May, water was available for all first priority rights, but it steadily decreased until only about 30 percent of these rights could be satisfied by the end of July. Thereafter the flow remained fairly constant for the remainder of the season.

Scammon Reservoir did not contribute to the stream flow during the season.

Thoms Creek. The flow of Thoms Creek was sufficient to supply most demands until July 10. After that date the flow steadily declined until the latter part of July, when water was available for 60 percent of the first priority allotments. The stream flow continued to drop until the end of the season, reaching a low which restricted deliveries to 40 percent of first priority allotments for the users above the recorder station.

Gleason Creek. On May 1, the flow of this stream was sufficient to supply first and second priority allotments. The flow decreased steadily until the end of June, at which time the creek was dry. It remained dry for the rest of the season.

Shields Creek. The Pepperdine Ditch, which supplies most of the water to Plum Canyon Reservoir from Shields Creek, was regulated on July 1. For the remainder of the season the major source of water to the reservoir was runoff from the adjoining meadow lands.

Parker Creek. The flow in Parker Creek was sufficient to satisfy most demands until the middle of April. At that time the Dorris Reservoir Ditch from Parker Creek was closed in order to supply water to the downstream users.

The stream flow gradually decreased until, on July 20, water was available for only 30 percent of third priority allotments. The flow remained the same for the remainder of the season.

North Fork Pit River. The flow in this stream met all demands until April 18 and decreased steadily thereafter until by the end of the season the supply was sufficient for only six percent of first priority rights.

During 1959, repairs were made to the dam owned by Mr. Oran Fitch, located directly upstream from the United States Geological Survey gaging station. The dam is used to raise the normal water surface to sub-irrigate the lands bordering the stream. This structure, although not mentioned in the North Fork Pit River Decree, has been allowed to operate for the purpose of sub-irrigation.

Seiad Creek Service Area

There were only four diversions from Seiad Creek in use during the 1959 season, numbers 3, 7, 10, and 12. For this reason, sufficient water was available to satisfy the demands of these diversions until the first of August. Then the flow gradually decreased to about 50 percent of the rate needed to fully meet these allotments.

Shackleford Creek Service Area

The lower Shackleford Creek and Mill Creek groups had sufficient water to satisfy their third and fourth priority allotments throughout the season. Of the upper Mill Creek

group, first priority allotments received water only at the beginning of the season.

Early in July, the natural flow in upper Shackleford Creek was supplemented by releases from Cliff Lake. The water was routed through the spillway of Campbell Lake Dam and thence into Shackleford Creek. Due to trouble with the valve stem on the outlet gate of Campbell Lake, it was not possible to release water from that reservoir until the end of August.

Shasta River Service Area

To obtain records of stream flow and to facilitate water distribution during 1959, water stage recorders were maintained by the department in the Shasta River Watermaster Service Area. The locations of these recorders and the types of control, in the case of stream gaging stations, are shown in Table 7.

TABLE 7

RECORDER STATIONS IN SHASTA RIVER
WATERMASTER SERVICE AREA - 1959

Station	Type of control
Shasta River near Edson-Foulke Yreka Ditch	rated section
Shasta River at Edgewood Bridge	rated section
Shasta River near Montague	rated section
Parks Creek above the Edson-Foulke Yreka Ditch	rated section
Little Shasta River above Harp Ditch	rated section
Beaughan Creek below International Paper Company mill pond	2-foot Parshall flume
Carrick Creek at Highway 97	3-foot rectangular weir
Dwinnell Reservoir at outlet tower	
Mill Ditch at head	1-foot Parshall flume
Quigley No. 3 headgate	4-foot rectangular weir
White Mountain Ranch Ditch headgate	4-foot rectangular weir
Montague Water Conservation District bypass canal from Parks Creek	rated section

Dwinnell Reservoir. Deliveries to water right owners below Dwinnell Reservoir are made in accordance with agreements between the Montague Water Conservation District and the several parties that have water rights to the natural flow of the stream. The agreements specify the amounts of water to be released to the respective owners in lieu of

their natural flow rights. In general, each agreement sets forth the total amount of water in acre-feet, measured at the heads of the respective ditches to which the water right owner may divert, and provides that delivery from the reservoir shall be made upon demand.

Delivery of water to the Montague Water Conservation District commenced on March 18 and continued throughout the season. Data on Dwinnell Reservoir operation during the 1959 season are set forth in Table 8. Owners of rights to natural flow of the Shasta River received their allotments in the amounts shown in Table 9.

TABLE 8

OPERATION OF DWINNELL RESERVOIR - 1959
(IN ACRE-FEET)

Date	Storage	Change in storage	Inflow to reservoir	Total draft	Measured release	Spill, seepage, and evaporation
March 1	40,600					
		0	4,152	4,152	537	3,615
April 1	40,600					
		-5,800	2,548	8,348	4,263	4,085
May 1	34,800					
		-4,600	2,505	7,105	3,741	3,364
June 1	30,200					
		-5,800	1,616	7,416	3,587	3,829
July 1	24,400					
		-7,400	700	8,100	5,053	3,047
August 1	17,000					
		-5,700	697	6,397	4,169	2,228
Sept. 1	11,300					
		-2,700	960	3,660	1,973	1,687
Oct. 1	8,600					
TOTALS		-32,000	13,178	45,178	23,323	21,855

TABLE 9

DELIVERIES TO NATURAL FLOW WATER
RIGHT OWNERS BELOW DWINNELL RESERVOIR
1959

Name of water right owner	Allotment as per agreement, in acre-feet	Amount delivered from Dwinnell Reservoir	
		Acre-feet	Percent of allotment
Fred Quigley	198	198	100
Marvin Miller and Inez M. Miller	924	924	100
K. K. Waters and Emily S. Waters	464	464	100
John W. Taylor	1,200	1,200	100
W. W. Valentine, Jr.	595	596	100
TOTALS	3,382	3,382	

Beaughan Creek. On July 22, the date of the annual measurement of the flow of this stream, the discharge was measured as 6.92 second-feet. This is sufficient to supply about 84 percent of second priority allotments.

The International Paper Company diverts practically the entire flow of Beaughan Creek, including the downstream users' share of the water available, for industrial use at its saw mill. After such use, the downstream users' share of the water, which is equivalent to 65 percent of the measured flow of Beaughan Creek, is returned to the stream below the mill pond. During the 1959 season, shortages occurred for all second priority users below the mill. However, these shortages did not occur for more than a few days at a time.

Carrick Creek. Sufficient water was available to supply all allotments from this stream until June 1. After this, water was available for second priority rights only during the haying period when water was not being diverted by a portion of the owners of first priority rights.

Parks Creek. Water was available for 100 percent of rights during April. Beginning in May, the flow decreased steadily until by the end of July there was no water available for the Edson-Foulke Yreka Ditch. The record of flow available for distribution in Parks Creek is presented in Table B-37.

Big Springs. The flow of Big Springs was sufficient to supply all demands during the entire irrigation season. Diversions by Big Springs Irrigation District are set forth in Table B-45.

Lower Shasta River. Water was available to satisfy all requirements from this stream until about the middle of July at which time it was necessary to limit the deliveries of water to the Grenada Irrigation District. The shortage continued until the end of August, when sufficient water was again available for all users. The Grenada Irrigation District diverted an average of 28 second-feet during the season, or about 60 percent of their allotment. This is slightly lower than the usual amount of water diverted by the district.

Little Shasta River. Because of the extreme shortage of water, regulation of the Little Shasta River was necessary on April 1. On this date, water was available for 100 percent of the fifth priority allotments. The water supply slowly decreased during the remainder of the season with only stock water being available during the latter part of August. The record of the daily mean discharge of the Little Shasta River near Montague is presented in Table B-40.

South Fork Pit River Service Area.

West Valley Reservoir was regulated in accordance with the bylaws of the South Fork Irrigation District. The amount of water to which each member is entitled is determined by the total amount of water in storage at the beginning of the irrigation season. The names of the water users and percent of stored water used by each during 1959 are shown in Table 10.

TABLE 10

PERCENT OF STORED WATER USED BY DIVERTERS
ON SOUTH FORK PIT RIVER - 1959

Name of present owner	Name of original owner	Percent of stored water used
Beeson, Somer and Beeson Georgia	Williams, Roy	0.80
Burmister, Arthur H.	Stepp, Ray	1.07
Collins, John P.	Armstrong, W. E. (Doty, Frank E.)	47.80
	McArthur, Frank (Monroe, N. H. and Monroe, Harold)	
	McArthur, Frank (Winema Farms)	
Derner, Anna C.	Gaustad, R. O.	1.79
Flournoy Bros.	Flournoy, J. D. McGarva, Douglas Stinson, A. L. Van Loan, D. E. Coffman, A. T. Christensen, V. E.	16.51
H. C. Cattle Co.	Christensen, V. F.	14.91
McGarva, Peter and McGarva, Phyllis	McGarva, John and McGarva, Peter Gustad, R. J.	4.58
Nelson, Katie H.	Nelson, Katie H.	2.74
Ramsey, Masten and Ramsey, Addie M.	Hughes, Jesse	2.23
Van Loan, Kenneth D. and Van Loan, Bernardine	Hughes, W. H. and Van Loan, D. E.	5.06
Williams, Gary and Williams, Theresa	Williams, Gary and Williams, Theresa	2.51
TOTAL		100.00

The early irrigation of grain land in 1959, combined with the below-normal flow of the Pit River and its tributaries, made it necessary to release water from the West Valley Reservoir during the latter part of March. Releases were continuous throughout the remainder of the season. Reservoir storage at the beginning of the season was about 15,800 acre-feet. Data on daily mean releases from West Valley Reservoir for the 1959 season are presented in Table B-50.

The daily mean discharge of the South Fork Pit River near Likely, as computed by the United States Geological Survey, is presented in Table B-48. The flow passing that station is the impaired flow, after use by upstream irrigators in Jess Valley and diversions to storage in West Valley Reservoir. Plate 3 "Hydrographs of South Fork Pit River near Likely and West Valley Reservoir Releases, 1959 Season" show the quantities of water available in this area.

Fitzhugh Creek. Distribution of water on Fitzhugh Creek was made in accordance with past practices with little or no modifications. Records of the daily mean discharge of Paine Ditch above the North Fork Fitzhugh Creek, Bowman Ditch, at the head, and North Fork Fitzhugh Creek below the Bowman Ditch are presented in Tables B-54 through B-56.

Pine Creek. Due to the high elevation of the Pine Creek watershed, the flow in this stream is often inadequate

to meet the irrigation demands until the snow melt, which usually begins about May 1. However, during 1959, there was never sufficient water to fill the second priority rights on this stream. By the first of July, and for the remainder of the season, water was available for only a portion of the first priority rights. A record of the daily mean discharge of Pine Creek is presented in Table B-51.

Pit River and Rattlesnake Creek in Hot Springs Valley and Big Sage Reservoir. The major sources of water for irrigation in Hot Springs Valley are the North and South Forks of Pit River, Big Sage Reservoir, and Rattlesnake Creek. The two forks of the Pit River combine at the upper end of the valley and are joined a short distance below by Rattlesnake Creek. The natural channel of Rattlesnake Creek is used to convey water released from Big Sage Reservoir for irrigation in Hot Springs Valley.

Storage in Big Sage Reservoir was about 62,000 acre-feet at the beginning of the irrigation season. Data on daily mean releases from Big Sage Reservoir are presented in Table B-53 and are shown on Plate 4, "Hydrographs of Pit River near Canby, Pit River below Alturas, and Big Sage Reservoir Releases, 1959 Season".

Records of the daily mean discharge of the Pit River below Alturas and Pit River near Canby are presented in Tables

B-1 and B-52, and are shown on Plate 4 "Hydrographs of Pit River Near Canby -- Pit River Below Alturas and Big Sage Reservoir Releases 1959 Season".

Surprise Valley Service Area

Stream flow measuring stations equipped with water stage recorders were maintained during the period of watermaster service in 1959 on Bidwell Creek, Cedar Creek, Eagle Creek, Emerson Creek, Mill Creek, Owl Creek, Pine Creek, Rader Creek, Soldier Creek, North Deep Creek and South Deep Creek.

Records of discharge at the above stations are presented in Tables B-57 through B-67.

Bidwell Creek. Due to the dry year, watermaster service was requested by the water users on this stream during April. Distribution began on April 11, at which time a flow of 26 second-feet was available. This was sufficient to supply water to 57 percent of first priority allotments. The flow remained at approximately 25 cubic feet per second until about June 1 when the stream rose to a high of about 34 second-feet then gradually diminished until the latter part of July when it reached a low of 3.6 second-feet. The available supply thereafter remained nearly constant until the end of the season.

Mill Creek. Water was available from this stream for all allotments until June 1. The flow then gradually diminished, reaching a low of about 74 percent of first priority allotments by the middle of August and holding nearly constant for the remainder of the season.

There were several concrete diversion dams and measuring devices built during the fall of 1959. N. Bettendorf built a concrete diversion dam and a one foot Parshall flume on the Streiff Ditch. C. Phipps constructed a concrete diversion dam and Parshall flume on the Weimer upper ditch. H. Davis built a concrete diversion dam and one foot Parshall flume on the Wilson Ditch. These structures were designed by the Soil Conservation Service and the Department of Water Resources.

Soldier Creek. Distribution of water on Soldier Creek began on March 19 when the water was turned to the "lower users" for the first rotation. Water was available for all water rights until the second week in April. By June 19, only the first priority rights, consisting of 1.90 cubic feet per second, were receiving water. By the end of July, water was available for only 71 percent of first priority allotments. The flow was nearly constant for the remainder of the season.

Pine Creek. Distribution of water on Pine Creek began on March 20 when the entire flow was diverted to the

north channel. The water was never shifted to the second channel during the season because the flow was less than the four second-feet needed to satisfy the north channel users' allotments. Consequently, only a portion of the users received water during the 1959 season.

Cedar Creek. The Thoms Creek Ditch was opened during early April and water was available for this diversion to about June 1. During this period the flow in the ditch averaged approximately 0.80 second-foot.

The other ditches on the creek had water available until about May 10.

Deep Creek. There was never sufficient flow in North Deep Creek to supply first priority rights. The stream reached a high stage during the first week of April, when water was available for 65 percent of first priority rights. The water supply decreased gradually during the remainder of the season until by the middle of September the available water was sufficient only to supply stock water to part of the users on the Company Ditch.

On South Deep Creek, water was available for only the first and second priority water rights during the first week in April. By the middle of April water was available for only first priority water rights. The flow decreased to a low of seven percent of the first priority rights by August 8 and remained nearly constant for the remainder of the season.

Owl Creek. The maximum flow of this stream was reached during the last part of May. The flow then decreased gradually until, by the middle of August, water was available only for second priority rights.

A wooden three-foot Parshall flume was installed in the Company Ditch and a two-foot Parshall flume was installed in the Miura Ditch.

Rader Creek. Runoff of Rader Creek reached a high of about 14 second-feet from May 15 to June 18. The flow decreased gradually until the latter part of July, when approximately 1.4 second-foot was available for distribution.

The Cockrell Diversion was opened on May 20 and closed June 15. Mr. L. Cockrell installed a nine-foot weir on the main stream and a 1.5 foot weir in his ditch. These were operational by June 20.

Eagle Creek. Runoff of Eagle Creek increased during April and May, reaching a high in June when water was available for all rights. Thereafter the supply decreased gradually until the first part of August when approximately 1.40 second-foot was available for distribution.

During the season, several concrete control structures and measuring devices were designed for Kelly Diversion No. 12 and Myers Diversion No. 19. Permission from the land owners involved was obtained subsequently for building these structures and straightening the main channel at these diversion sites.

Emerson Creek. Distribution of water from Emerson Creek began on April 1, at which time there was a flow of approximately eight second-feet available. The stream discharge gradually decreased until the middle of August, when a flow of 2.50 second-feet was available for distribution.

Susan River Service Area

Records of daily mean discharge of Susan River at Susanville and Willow Creek near Susan River, as obtained from the United States Geological Survey, are presented in Tables B-68 and B-71.

Automatic water stage recorders were maintained by the department on Gold Run Creek above diversions, on Susan River at Johnstonville, Baxter Creek above diversions, and on the Newhaus-Jacobs Ditch. Records of daily mean discharge at these locations are presented in Tables B-69, B-70, B-73 and B-75, respectively.

Willow Creek Valley. The Barron Ranch delivered water to the downstream users through the Eagle Creek bypass canal. In early June, the Barron Ranch made up delivery deficiencies up to that date. The water supply during the post haying season was adequate to satisfy all requirements.

Lassen, Gold Run, Hills, and Piute Creeks. Sufficient water was available in Lassen Creek to supply all

demands during April and May after which the supply diminished rapidly. For the first time since watermaster service had been provided in the area there was no stock water available during the months of July and August. Rains made some stock water available during September.

Holtzclaw Creek was dry during July and August but produced stock water during the month of September. Water was available in Gold Run Creek to supply all demands during April. By July 25 the flow had decreased until water was available for only the upper users. No stock water was available during September.

Hills Creek. Sufficient water was available in Hills Creek to satisfy all requirements during April and May. By early July all flow had ceased. Emerson Reservoir was emptied by July 15. Water was released from Lower Ridgemore Reservoir until early August.

Emerson Reservoir and Lower Ridgemore Reservoir were repaired during 1959 in order that they might store the amount of water prescribed in the Susan River Decree.

Piute Creek. Water was available to supply all requirements from this stream during April and May. The supply then diminished until only the California Pacific Utility Company rights were met. In late August a local rain storm provided enough water to supply all rights, and irrigation continued through September.

Susan River. The amount of water available in the Susan River was sufficient to meet all requirements during April and the early part of May. The flow then diminished until water was available for only first priority rights. Beginning in July and continuing through the end of the season, water was available to supply stock water only.

The Old Susan Channel users protested the release of mill pond water by the Fruit Growers Supply Company. As a result of an investigation by the Department of Fish and Game, the Fruit Growers Supply Company constructed a settling basin into which all mill pond releases were diverted prior to being released into the Susan River.

Storage Reservoirs. At the beginning of the irrigation season the McCoy Reservoir gage height was 8.2 feet. Releases from McCoy and Hot Flat Reservoirs were made from May 8 to June 1 and June 23 until July 3. Lake Leavitt was emptied by August 1.

Data on the flow of Susan River at Susanville and releases from the reservoirs are shown graphically on Plate 5, "Hydrograph of Susan River at Susanville and Stored Water Available for Rediversion at Susanville, 1959 Season".

Baxter Creek. The water supply in Baxter Creek was sufficient to satisfy all demands during April. Thereafter the flow decreased rapidly until June 1, when the flow ceased.

Parker Creek. During April and early May water was available in this stream for all allotments. From the middle of May to the end of the season water was available for only first priority rights.

CHAPTER IV. CHANGES OF OWNERSHIP OF LANDS AND WATER RIGHTS

At the end of each irrigation season the watermaster in each service area notes the changes of ownership which have occurred during the past year. Changes of ownership which occurred between January 1, 1959, and January 1, 1960, are shown by service area in Table 11.

TABLE 11

CHANGES OF OWNERSHIP OF LANDS
INCLUDED IN NORTHERN CALIFORNIA WATERMASTER
SERVICE AREAS JANUARY 1, 1959 TO JANUARY 1, 1960

Tract number	Name of water right owner appearing in 1959 statement	Name of water right owner appearing in 1960 statement	Amount of water, in second-feet
	Ash Creek Service Area		
17-17-1	Leonard, Earl	Milon, D. Morley	0.10
17-15	Studley, Frank	Wright, Marie and Weigand, Norma	3.20
	Burney Creek Service Area		
1-7	Cook, Howell H.; Estes, Carson G., and Estes, Ruth M.	Cook, Howell H.; Estes, Carson G., Jr.; and Estes, Hiram	1.26
1-7-1	Cook, Howell H.; Estes, Carson G.; and Estes, Ruth M.	Tyler, George	0.11
1-2	Estes and Estes	Estes, Carson G. Jr.; and Estes, Hiram	4.32
1-1-1	Morgan - Peacock Properties Corporation	Shasta Meadows Ranch Pierpoint, E. M.	5.85
	Butte Creek Service Area		
13-26-1	Brazell, Franklin	Carmenzind, Joseph	3.11
	Cow Creek Watermaster Service Area		
4-29	Armstrong, H. G., and Lucille K.	Armstrong, Lucille and Miller, Emil	0.75
4-5	Charles, Edwin E.	Haley, Arthur W.; Francis, John F. and Silby	2.00

Tract number	Name of water right owner appearing in 1959 statement	Name of water right owner appearing in 1960 statement	Amount of water, in second-feet
	Cow Creek Watermaster Service Area		
4-1	Greer, John A. Greer, Alice E.; Miller, Robert J.; and Miller, Leota H.	Greer, Alice E.; Miller, Robert J.; and Miller, Leota H.	0.25
4-80	Boyle, Tilden	Boyle, George T. and Ingrid Sara	0.40
4-73	Endicott, Wesley, J.	Porteous, Floyd W. and Juanita M.	0.10
4-9	Hansen, Estate of Alex	Blair, Maude Hansen; Alex, Jerry, and Alex, Hansen, Jr.	0.63
4-8	Mazzini, J. A.	Purham, Joel H. and Clara M.	0.15
4-46	McCarty, Helen H.	Walker, Alyce H.	0.10
4-18 4-19	Morine, Mrs. R. H.	Schumacher, Betty; Herman, Ruth Elizabeth	2.74
4-28	Raine, Robert F.; Raine, Robert J.; and Raine, Shirley E.	Rose, Billy L. and Rose, Sylvia	1.07
	Hat Creek Service Area		
2-19-1	Westlund, Edwin F. and Westlund, Lillie A.	Westlund, John and Westlund, Rachel	0.033
2-19-3	Westlund, Edwin F. and Westlund, Lillie A.	Long, James and Long, Helen	0.032
2-13	Opdyke, Perry	Hat Creek Hereford Ranch; Thompson, Lois V., Secretary	9.56
	Indian Creek Service Area		
16-60	Wolf Creek Timber Company, Inc.	California Pacific Land and Lumber Co.	0.10

Tract number	Name of water right owner appearing in 1959 statement	Name of water right owner appearing in 1960 statement	Amount of water, in second-feet
	Indian Creek Service Area		
16-12	Goodman, B. P.	Santoni, James and Santoni, Glenna M.	0.25
	Middle Fork Feather River Service Area		
10-13 10-18-2 10-23	Bankoifer, Roy G. and Bankoifer, Loraimae E.	Carson Land and Livestock Company	6.10
10-30 10-44 10-65 10-66	Macmillan, Gordon and Macmillan, Dorothe	Terhe Farms, Inc.	31.75
10-70 10-71	O'Mohundro, J. S. and O'Mohundro, Edna	Taylor, Robert Wayne and Taylor, Leona B.	1.84
	North Fork Cottonwood Creek Service Area		
3-6	Pridmore, Martha; Pridmore, M. T.; Pridmore, E.; and Bartley, F. E.	Bartley, Robert W., et al	1.25
3-5	Sunny Hill Mining Co.	Marsicano, Frank, et al	0.05
3-13	Tipton, Mrs. Orrin	Ehrmann, Mary T.	0.125
	North Fork Pit River Service Area		
9-69 9-70	Beebe, Floyd	Gardner, Glenn R. and Juanita C.	2.54
9-38	Brainard, W. L. and Lorper, C. J.	Roger Jessup Farms	1.95
9-65 9-67 9-68 9-72 9-73 9-74 9-75	Comrie, J. F.	Hacker, Harvey J.	7.71

Tract number	Name of water right owner appearing in 1959 statement	Name of water right owner appearing in 1960 statement	Amount of water, in second-feet
	North Fork Pit River Service Area		
9-7	Cook, C. J.	Henderson, Grady	0.03
9-58-3	Dolan, Paul F. and Francis	James, Roland, and Iola	0.0375
9-84 9-85	Dukes, W. F.	1/2 = Peck, Robert H. and Edna H. 1/2 = Lowes, Albert and Leona	0.75
9-36 9-37	Judy, J. W.	Balsley, Floyd E. and Roselma M.	0.65
9-113-1	Porter, Jim	Larsen, Kent P.	0.49
9-21-3	Reid, Lillian B.	Lawson, Truman A.	5.195
9-21	Thompson, John A.	Farnsworth, J. A. and Farnsworth, Marjorie	0.66
9-99	Wells, J. P. and Maude B.	Lee, Harry K. and Gertrude R. Brock, Albert L. and Mary	1.20
9-125	Williams, Kirk	Walthers, N. F.	0.40
	Shackleford Creek Service Area		
14-17	Youngren, Gerald M. and Frances R.	Evans, Robert J. and Olga Virginia	4.50
	Shasta River Service Area		
5-53-2	Brahs Brothers	Brahs, Frank and Dola	4.50
5-65A-2	Dougherty, Chester C. and Ida M.	Dougherty, Chester C. and Son	2.35
5-6-1	Martin, Ida A.	Martin, Ida A.	3.00
5-6-2	Martin, Ida A.	Martin, Brice C.	0.36

Tract number	Name of water right owner appearing in 1959 statement	Name of water right owner appearing in 1960 statement	Amount of water, in second-feet
	Shasta River Service Area		
5-65-3 5-66	Maxwell, Glenn C.	Maxwell, Edna H.	2.70
5-49	Mills, Maybelle B.	Nelson, Sedgley D.	1.20
5-88	More, Isabella C.	Cort, William E., Jr. and Ruth A.	6.00
5-61	Quigley, Fred	Quigley, Fred and Smith, Warren V.	1.15
5-56-4	Wright, Floyd E. and Elva Mae	Hammond, Dwight L. and Anna	2.21
	South Fork Pit River Service Area		
7-37 7-40	Doty, Frank E.	Collins, John P.	5.10
7-67 7-63 7-66	Kelley, Dora H. Kelley, S. B.	Kelley, John	2.58
7-42	Thomas, Elmer O.	Weber, Herman C. Weber, John D.	1.37
	Surprise Valley Service Area		
8-120	Berryessa, Bertha	Berryessa, Bertha	2.82
8-156	Berryessa, Bertha	Miura, Eulalio and Elmore	0.185
8-136	Bone, John B.	Powers, Harold J.	5.00
8-70	Davis, LeRoy	Davis, Blanch I.	2.50
8-128 8-129	Dollarhide, Lillie L.	Stevens, Jesse W.	3.50
8-166	Grove, Jack and Irvine	Boyer, John M.	4.40
8-161	Harden, Frank	Harden, Ava Jo and Harold	0.03

Tract number	Name of water right owner appearing in 1959 statement	Name of water right owner appearing in 1960 statement	Amount of water, in second-feet
	Surprise Valley Service Area		
8-63	McMullen, George C. Estate	Stewart, Mae W. Testamentary Trustee	1.64
8-32 8-34	Steward, Brucie D.	Wimer, Lipwall and Husband	0.28
8-149	Street, Grace A.	Lown, Thomas and Francis	0.08
8-106	Toney, J. Ervin and Toney, Ruby E.	Espil, John M. and Peggy	1.05
	Susan River Service Area		
12-69	Brugger, Robert	Amesbury, Robert H. and Frances	0.40
12-156	Buck, Freeman and Margaret	Kallsen, Marie and Kallsen, Clifford	0.01
12-65-1	Burnett, C. I., et al	Lost Meadow Golf Club	0.30
12-64	Clark, Lester and Lena	Satica, Frank Satica, Domingo Satica, Robert Jr.	3.60
12-66-1	Clark, Lester and Lena	Bauer, Willford and Gwenn A.	0.37
12-14-4	Forgaard, Earl	Nabus, H. A., Jr.	0.03
12-176	Gardner, M. H. and Mary E.	Parsons, James A.	0.50
12-88	Johnston, Frank Thomas, and Edna L.	Chappuis, Nancy C.	2.85
12-131	Lagier, Ruth, et al	Hoffman, Clarence and Wilma	2.76
12-32-2	Lewis, Wilson B.	Pace, James R. and Edith	0.013
12-84	Perry, Lizzie E.	Raker, Marie	1.50

Tract number	Name of water right owner appearing in 1959 statement	Name of water right owner appearing in 1960 statement	Amount of water, in second-feet
	Susan River Service Area		
12-77-2	Raker, Royce and Raker, Merrill	Saroian, Dixie R.	0.25
12-134	Reichle, Arthur E., et al	Ellena, Jack D. and Jackquelvyn D.	2.50
12-81	Reuck, Henery	Bills, Alvin J.	0.15
12-68-1	Ridenour, Minnie G.	Duncan, Frank and Marcelene	2.58
12-68-2	Sella, Ancilla	Sella, Harry Jr., and Marie	2.62
12-135 12-78-2	Tibbals, John and Louisea	Denton, Lee and Flora	1.06
12-169	Winchell, Ray	Mulroney, Wanda	0.90

APPENDIX A

PRECIPITATION RECORDS

APPENDIX A

PRECIPITATION RECORDS

TABLE OF CONTENTS

TABLE A-1

PRECIPITATION AT BIEBER, LASSEN COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.80	0.87
November	1.75	1.47
December	2.21	2.24
January	2.44	3.08
February	2.35	1.55
March	1.86	0.54
April	1.28	0.24
May	1.28	1.88
June	0.41	0.39
July	0.23	0
August	0.14	0
September	0.48	0.94
TOTALS	16.23	13.20

* For period of record (1929-1960)

TABLE A-2

PRECIPITATION AT HAT CREEK POWERHOUSE NUMBER 1
SHASTA COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.30	0.62
November	1.82	0.96
December	2.53	1.77
January	2.45	3.65
February	2.91	3.23
March	1.92	0.24
April	1.55	0.11
May	1.20	1.44
June	0.80	0.12
July	0.16	0
August	0.15	0.09
September	0.44	0.92
TOTALS	17.23	13.15

* For period of record (1921 to date)

TABLE A-3

PRECIPITATION AT CHICO, BUTTE COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.30	0.48
November	2.65	0.36
December	4.50	2.03
January	4.70	6.22
February	4.15	5.61
March	3.21	0.91
April	1.78	1.94
May	0.99	0.66
June	0.41	0
July	0.02	0
August	0.03	0
September	0.48	1.86
TOTALS	24.22	20.07

* For period of record (1870 to date)

TABLE A-4

PRECIPITATION AT REDDING, SHASTA COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	2.26	.57
November	4.06	.74
December	6.48	2.55
January	7.19	8.89
February	5.99	7.24
March	4.96	2.09
April	2.93	.50
May	1.83	.23
June	0.86	.14
July	0.11	0
August	0.06	0
September	0.67	6.48
TOTALS	37.40	29.43

* For period of record (1875 to date)

TABLE A-5

PRECIPITATION AT GREENVILLE, PLUMAS COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	2.61	0.76
November	4.81	1.50
December	5.93	2.92
January	8.89	7.96
February	5.44	10.12
March	6.47	1.65
April	2.84	1.12
May	1.71	1.33
June	0.75	0.40
July	0.35	0
August	0.21	0.81
September	0.94	2.27
TOTALS	40.95	30.84

* For period of record (1943 to date)

TABLE A-6

PRECIPITATION AT VINTON, PLUMAS COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	0.52	0.09
November	1.02	0.22
December	1.88	0.56
January	1.99	2.22
February	1.31	1.86
March	1.14	0.24
April	0.89	0.16
May	0.64	2.18
June	0.83	0
July	0.06	0.13
August	0.10	0.38
September	0.25	0.70
TOTALS	10.63	8.74

* For period of record (1940 to date)

TABLE A-7

PRECIPITATION AT ALTURAS, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	0.99	0.85
November	1.23	0.84
December	1.51	1.09
January	1.79	1.11
February	1.37	1.24
March	1.40	0.18
April	1.11	0.20
May	1.19	1.76
June	0.79	0.36
July	0.40	0.09
August	0.22	0.64
September	0.53	0.66
TOTALS	12.53	9.02

* For period of record (1904 to date)

TABLE A-8

PRECIPITATION AT HAPPY CAMP, SISKIYOU COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	3.40	1.21
November	6.81	3.93
December	8.63	7.43
January	8.05	16.23
February	7.23	9.82
March	5.34	5.12
April	2.63	0.46
May	1.71	0.89
June	0.83	0.12
July	0.35	0
August	0.12	0.07
September	0.67	2.10
TOTALS	45.77	47.38

* For period of record (1914 to date)

TABLE A-9

PRECIPITATION AT FORT JONES, SISKIYOU COUNTY, CALIFORNIA

In inches

Month	Average precipitation	1958-1959 precipitation
October	1.78	0.49
November	2.88	1.18
December	3.66	2.34
January	3.09	4.70
February	2.83	3.08
March	2.41	1.21
April	1.12	0.04
May	1.24	0.09
June	0.74	T
July	0.39	0
August	0.29	0.39
September	0.43	0.42
TOTALS	20.86	13.94

* For period of record (1936 to date)

TABLE A-10

PRECIPITATION AT YREKA, SISKIYOU COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.23	0.30
November	2.39	1.20
December	2.93	1.09
January	2.88	3.10
February	2.36	1.27
March	1.65	0.82
April	1.01	0.12
May	1.03	0.33
June	0.64	0.60
July	0.36	0.84
August	0.26	0.80
September	0.48	0.13
TOTALS	17.22	10.30

* For period of record (1871 to date)

TABLE A-11

PRECIPITATION AT JESS VALLEY, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.31	0.76
November	1.62	1.19
December	1.84	1.56
January	1.91	1.33
February	1.90	1.45
March	1.89	0.70
April	1.66	0.13
May	1.93	2.57
June	1.52	0.79
July	0.34	0.11
August	0.25	0.50
September	0.69	0.67
TOTALS	16.86	11.76

* For period of record (1929 to date)

TABLE A-12

PRECIPITATION AT LAKE CITY, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.80	0.65
November	2.16	2.66
December	2.77	1.59
January	2.78	2.00
February	2.11	0.61
March	2.25	0.86
April	1.60	0.47
May	1.62	1.67
June	1.41	0.60
July	0.21	0.36
August	0.20	0.06
September	0.55	0.67
TOTALS	19.46	12.20

* For period of record (1929 to 1960)

TABLE A-13

PRECIPITATION AT CEDARVILLE, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.05	0.80
November	1.49	1.56
December	1.55	1.15
January	1.74	1.19
February	1.51	0.87
March	1.46	0.47
April	0.94	0.18
May	1.00	1.60
June	0.74	0.33
July	0.44	0.19
August	0.17	0.22
September	0.48	0.54
TOTALS	12.37	9.10

* For period of record (1894 to date)

TABLE A-14

PRECIPITATION AT SUSANVILLE AIRPORT, LASSEN COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.02	0.59
November	2.05	0.91
December	2.91	1.09
January	2.51	1.88
February	2.33	3.29
March	1.56	0.22
April	0.85	0.04
May	0.85	0.32
June	0.69	0.16
July	0.16	0
August	0.08	0.21
September	0.30	1.03
TOTALS	15.31	9.74

* For period of record (1940 through 1947)

TABLE A-15

PRECIPITATION AT SIERRAVILLE, SIERRA COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.38	0.39
November	2.77	0.97
December	3.82	1.10
January	4.97	4.91
February	3.88	5.32
March	2.88	0.50
April	1.65	0.63
May	1.10	2.79
June	0.60	0
July	0.24	0.75
August	0.15	0.29
September	0.37	2.51
TOTALS	23.81	20.16

* For period of record (1909 to date)

TABLE A-16

PRECIPITATION AT LAKEVIEW, OREGON

In inches

Month	Average precipitation*	1958-1959 precipitation
October	1.14	0.49
November	1.43	0.67
December	1.99	1.05
January	1.73	1.42
February	1.61	0.99
March	1.49	0.81
April	1.17	0.22
May	1.45	1.52
June	1.38	1.05
July	0.18	0.05
August	0.16	0.65
September	0.52	1.63
TOTALS	14.25	10.55

* For period of record (1884 to date)

APPENDIX B

STREAM FLOW RECORDS

APPENDIX B

STREAM FLOW RECORDS

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TABLE B-1

DAILY MEAN DISCHARGE OF PIT RIVER NEAR CANBY

From April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	Sept.
1	95	164	188	290	9.0	30
2	89	132	132	259	9.8	24
3	84	104	89	176	12	14
4	78	129	70	232	14	12
5	49	160	54	54	11	13
6	49	164	54	47	11	13
7	104	119	49	81	17	8.4
8	92	110	45	81	20	13
9	78	107	73	52	21	11
10	75	95	58	45	20	11
11	60	92	78	52	23	29
12	54	87	30	42	22	101
13	45	75	17	35	20	67
14	58	60	17	30	17	36
15	29	54	17	29	20	66
16	33	45	17	63	92	35
17	30	38	19	47	95	45
18	16	42	30	81	78	39
19	21	47	35	47	70	35
20	24	73	17	41	65	42
21	22	81	15	33	67	41
22	18	110	22	24	84	63
23	17	89	26	22	101	104
24	17	58	32	21	73	65
25	17	52	35	17	67	56
26	17	107	33	13	54	49
27	18	168	28	13	39	44
28	20	340	24	11	35	47
29	242	340	21	9.8	33	45
30	290	227	54	9.4	32	39
31		200		9.8	32	
Mean	61.4	118	46.0	63.5	40.8	39.9
Total acre-feet	3,650	7,280	2,740	3,900	2,510	2,380

Total for period - 22,460 acre-feet.

TABLE B-2

DAILY MEAN DISCHARGE OF PIT RIVER NEAR BIEBER

April 1 to October 1, 1959

In second-feet

Day	April	May	June	July	August	Sept.
1	200	5.2	89	14	0.5	0.2
2	200	5.6	133	12	.4	.2
3	200	15	117	9.7	.3	.2
4	181	28	100	22	.2	.2
5	172	31	217	21	.2	.2
6	133	35	227	21	.2	.3
7	47	34	138	54	.2	.4
8	42	99	93	184	.2	.3
9	26	120	63	126	.2	.2
10	35	212	42	32	.2	.2
11	76	129	31	20	.2	.1
12	49	129	23	17	.2	.1
13	42	129	16	23	.2	.1
14	30	74	13	26	.2	.1
15	34	48	13	14	.2	8.6
16	20	57	13	9.7	.2	9.3
17	14	39	3.4	7.1	.2	7.9
18	18	28	1.2	4.3	.2	14
19	20	24	2.5	2.8	.2	7.4
20	18	25	3.7	2.1	.3	1.9
21	42	23	3.1	1.7	.3	2.1
22	30	22	4.0	1.5	.4	1.3
23	17	21	5.0	2.8	.6	.7
24	16	19	14	2.3	.7	.6
25	10	29	10	1.9	.6	.6
26	9.2	37	6.4	1.3	3.4	.7
27	13	90	7.9	18	.5	1.2
28	11	74	13	7.9	.3	2.5
29	9.2	16	15	3.1	.3	2
30	6.9	14	15	1.5	.2	1
31		49		.7	.2	
Mean	57.4	53.6	47.7	21.4	.39	2.15
Total acre-feet	3,410	3,290	2,840	1,320	24.	128.

Total for period - 11,012 acre-feet

TABLE B-3

DAILY MEAN RELEASES FROM ROBERTS RESERVOIR

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	Sept.
1	N	N	N	N	0	0
2	0	0	0	0	0	0
3					0	0
4					0	0
5					0	0
6	R	R	R	R	32	0
7	E	E	E	E	43	24
8	L	L	L	L	43	35
9	E	E	E	E	43	34
10	A	A	A	A	11	32
	S	S	S	S		
11	E	E	E	E		16
12						
13						N
14						0
15						
16					N	R
17					0	E
18						L
19						E
20			10	21	R	A
					E	S
21			39	42	L	E
22			30	42	E	
23				42	A	
24				42	S	
25				42	E	
26				42		
27				44		
28				44		
29				44		
30						
31				33		
Mean			26	40	34	28
Runoff acre-feet			158	875	344	282

Total for period - 1,659 acre-feet

TABLE B-4

DAILY MEAN DISCHARGE OF HAT CREEK
AT UNITED STATES GEOLOGICAL SURVEY STATION

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1	193	169	145	140	132
2	181	169	140	140	130
3	174	172	138	140	128
4	174	174	138	140	128
5	172	181	136	142	128
6	172	183	138	142	128
7	174	176	138	142	128
8	176	174	138	142	130
9	176	172	138	136	132
10	176	169	147	128	132
11	176	167	147	126	132
12	183	167	147	126	132
13	193	169	147	126	134
14	193	165	147	126	136
15	183	162	145	128	136
16	178	160	147	128	136
17	178	158	145	128	136
18	178	158	142	126	167
19	178	158	138	132	147
20	176	162	136	134	142
21	174	165	136	136	140
22	174	162	136	138	138
23	172	160	136	138	136
24	172	160	134	138	134
25	174	158	132	140	134
26	178	156	132	140	134
27	174	156	132	138	136
28	172	153	132	138	136
29	169	149	134	134	136
30	167		136	132	
31					
Mean	177	165	139	135	135
Runoff acre-feet	10,870	9,790	8,550	8,290	8,040

Total for period - 45,540 acre-feet

TABLE B-5

DAILY MEAN DISCHARGE OF BUTTE CREEK ABOVE PARROTT DITCH

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1	394	238	143	134	116
2	384	218	147	134	116
3	363	214	147	134	116
4	352	222	143	134	116
5	332	214	143	134	116
6	323	238	150	134	110
7	323	226	147	131	107
8	318	206	150	131	110
9	313	206	150	131	113
10	313	210	131	131	116
11	313	192	134	131	116
12	308	192	143	131	113
13	304	188	140	125	113
14	250	188	140	119	116
15	281	118	140	122	125
16	290	184	140	119	125
17	285	180	140	116	128
18	281	166	140	107	166
19	272	166	140	116	218
20	272	163	140	116	195
21	268	153	140	122	166
22	263	147	140	131	150
23	285	150	137	128	143
24	276	147	134	125	137
25	285	147	131	119	134
26	268	157	134	122	134
27	272	160	134	122	131
28	254	157	134	119	131
29	250	157	134	119	131
30	246	147	134	119	128
31	238	-	134	119	-
Mean	296	184	140	125	131
Runoff acre-feet	18,200	10,950	8,600	7,690	7,810

Total for period - 53,250 acre-feet

TABLE B-6

DAILY MEAN DISCHARGE OF DURHAM COLONY DITCH

June 1 to September 21, 1959

In second-feet

Day	May	June	July	August	September
1		63	54	45	44
2		61	54	46	44
3		61	55	47	44
4		61	55	49	44
5		61	55	47	44
6		61	55	46	46
7		65	56	47	46
8	N	61	57	46	46
9	O	61	54	46	46
10		61	53	46	51
11	R	53	55	48	51
12	E	54	55	48	52
13	C	60	53	48	52
14	O	60	51	48	51
15	R	58	50	48	59
	D				
16		55	52	48	30
17		53	52	47	8
18		61	47	48	28
19		62	42	48	48
20		60	42	48	28
21		57	40	52	15
22		57	42	51	
23		56	45	51	N
24		55	45	51	O
25		55	44	48	
26		56	41	45	R
27		58	41	45	E
28		58	43	45	C
29		58	43	45	O
30		56	43	45	R
31		-	45	45	D
Mean		58.6	46.2	46.3	41.7
Runoff acre-feet		3,481	2,833	2,845	1,736

Total for period - 10,895 acre-feet

TABLE B-7

DAILY MEAN DISCHARGE OF EDGAR SLOUGH AT DAYTON DITCH

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1		21	17.0	15.0	15.0
2	N	21	17.0	15.0	15.0
3	O	21	17.0	15.0	15.0
4		22	17.0	15.0	15.0
5	R	22	18.0	15.0	15.0
	E				
6	C	22	18.0	15.0	15.0
7	O	22	18.0	15.0	15.0
8	R	22	15.0	14.0	15.0
9	D	22	14.0	14.0	14.0
10		22	16.0	15.0	14.0
11		22	16.0	15.0	14.0
12		20	16.0	15.0	14.0
13	22	20	16.0	15.0	14.0
14	22	20	16.0	14.0	0
15	22	20	16.0	15.0	0
16	23	20	16.0	15.0	0
17	23	21	15.0	15.0	0
18	23	21	15.0	14.0	0
19	24	21	15.0	14.0	0
20	23	20	15.0	14.0	0
21	23	20	16.0	14.0	0
22	23	21	16.0	14.0	
23	23	20	15.0	14.0	N
24	23	18.0	15.0	14.0	O
25	23	19.0	15.0	14.0	
26	NO	19.0	16.0	14.0	R
27		18.0	16.0	14.0	E
28	RECORD	17.0	15.0	14.0	C
29		17.0	14.0	14.0	O
30		17.0	14.0	14.0	R
31		-	15.0	14.0	D
Mean	22.8	20.3	16.3	14.5	14.6
Runoff acre-feet	588	1,204	970	887	376

Total for period - 4,025 acre-feet

TABLE B-8

DAILY MEAN DISCHARGE OF PARROTT DITCH

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1		105	68	68	60
2		105	72	68	58
3		100	72	67	58
4	N	98	70	63	60
5	O	98	74	68	59
6	R	99	72	70	59
7	E	100	75	67	58
8	C	98	71	68	53
9	O	99	70	68	60
10	R	101	60	68	58
	D				
11		92	70	67	56
12		68	68	64	56
13		59	68	60	56
14		59	68	64	49
15		68	68	62	46
16		75	68	59	92
17		88	68	52	106
18		84	72	56	130
19		76	76	56	
20		73	76	62	
21		68	80	63	N
22		68	75	60	O
23		71	66	55	
24		68	67	54	R
25	118	71	64	56	E
					C
26	117	76	68	62	O
27	117	80	68	62	R
28	116	77	68	60	D
29	115	75	68	62	
30	114	68	68	60	
31	108		68	58	
Mean	115.0	82.2	69.9	62.2	71.1
Runoff acre-feet	1,594	4,885	4,289	3,819	3,097

Total for period - 17,684 acre-feet

TABLE B-9

DAILY MEAN DISCHARGE OF HENDRICKS CANAL

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1	92.0	92.0	58.8	58.8	47.7
2	93.6	92.0	57.6	60.1	44.9
3	93.6	90.5	57.0	60.8	47.1
4	92.8	97.4	62.2	62.8	45.4
5	93.6	94.3	60.8	58.8	46.0
6	94.3	95.1	62.2	58.8	46.5
7	95.0	95.1	59.5	60.1	46.5
8	95.9	97.4	61.5	58.2	46.5
9	95.9	96.6	57.0	57.0	46.5
10	95.1	90.5	58.8	56.3	45.4
11	95.1	75.0	57.6	56.3	44.9
12	95.1	75.6	57.0	47.7	45.4
13	95.1	77.7	57.6	49.6	45.4
14	2.2	77.0	57.6	46.5	48.3
15	82.8	75.6	56.3	45.4	49.0
16	95.1	75.0	57.6	44.9	52.7
17	94.3	69.6	55.7	49.6	46.5
18	94.3	68.9	58.2	49.0	71.6
19	92.8	64.9	58.2	47.1	64.9
20	92.8	62.2	58.8	50.8	58.8
21	92.8	60.1	58.2	48.3	57.0
22	94.3	58.8	59.5	47.1	50.2
23	95.9	58.2	55.1	46.5	50.2
24	98.2	57.0	55.1	47.1	50.2
25	95.1	58.2	58.2	52.0	49.6
26	94.3	60.8	57.6	49.6	49.6
27	93.6	59.5	58.2	45.4	49.6
28	91.3	58.2	53.9	47.7	53.9
29	92.8	56.3	59.5	46.5	44.3
30	92.8	57.0	58.2	46.0	46.0
31	92.0		62.2	46.0	
Mean	90.8	74.9	58.2	51.6	49.7
Runoff acre-feet	5,584.	4,456.	3,582.	3,175.	2,957.

Total for period - 19,754 acre-feet

TABLE B-10

DAILY MEAN DISCHARGE OF NORTH COW CREEK NEAR INGOT

April 1 to September 30, 1959

In cubic feet per second

Day	April	May	June	July	August	Sept.
1	129	70	21	8.4	6.2	6.9
2	120	60	20	8.4	6.2	7.2
3	114	58	20	8.8	6.2	7.2
4	111	53	20	8.8	6.2	7.2
5	113	51	20	8.4	6.5	7.2
6	106	49	20	8.0	6.2	7.2
7	99	48	18	8.0	6.2	7.2
8	92	45	17	7.2	6.2	7.2
9	90	45	16	7.2	6.2	7.2
10	86	43	16	6.9	6.2	7.2
11	78	43	15	7.2	6.2	6.9
12	74	42	14	6.5	6.2	7.2
13	72	45	13	6.5	6.2	7.6
14	70	53	11	6.2	6.2	8.0
15	66	49	10	5.9	6.2	9.2
16	59	43	9.6	5.9	6.2	8.8
17	59	43	9.6	5.6	6.5	8.8
18	58	41	9.2	5.6	6.5	36
19	53	48	9.2	5.6	6.5	20
20	52	35	8.4	5.6	6.5	15
21	53	32	8.4	5.6	6.5	12
22	53	32	8.0	5.9	6.5	12
23	52	35	8.4	5.9	6.5	12
24	53	32	8.4	5.9	6.5	11
25	69	30	8.4	5.9	6.9	11
26	116	31	8.8	6.2	6.9	10
27	84	30	8.4	6.2	6.9	9.6
28	72	28	8.4	6.5	6.9	9.6
29	65	26	8.8	6.5	7.2	10
30	65	25	8.8	6.2	7.2	8.8
31		23		6.2	6.9	
Mean	79.4	41.2	12.7	6.7	6.5	10.2
Runoff acre-feet	4,727	2,535	757	412	397	605

Total for period - 9,433 acre-feet

TABLE B-11

DAILY MEAN DISCHARGE OF OAK RUN CREEK NEAR OAK RUN SCHOOL

April 1 to September 30, 1959

In cubic feet per second

Day	April	May	June	July	August	Sept.
1	5.5	5.8	4.2	1.6	0.8	1.6
2	5.2	5.6	3.1	1.5	1.1	1.3
3	5.0	4.8	2.7	1.5	1.0	1.6
4	4.9	4.2	2.9	1.4	1.1	1.6
5	4.7	4.0	2.7	1.8	.7	1.6
6	4.4	4.0	3.0	1.6	.6	2.0
7	4.2	2.9	2.4	1.2	.5	1.6
8	4.4	3.0	1.3	1.2	.5	1.7
9	4.2	3.4	1.9	.7	1.0	1.6
10	4.0	3.3	1.3	.9	1.3	1.5
11	3.5	3.2	1.6	1.3	1.4	1.0
12	4.2	2.7	1.4	.9	1.6	1.4
13	3.1	2.9	1.2	1.2	1.4	1.7
14	2.9	4.2	1.9	1.3	1.3	2.7
15	2.9	3.6	1.5	1.2	1.0	2.5
16	3.0	3.7	1.3	1.5	.7	2.9
17	2.9	4.2	1.8	.8	.5	2.8
18	2.9	3.9	1.9	1.1	1.1	11
19	3.2	3.6	1.9	1.0	1.8	4.2
20	2.9	3.7	2.0	1.3	2.4	3.4
21	2.9	3.7	1.6	1.1	2.4	3.1
22	3.3	3.6	1.9	1.0	2.2	2.9
23	3.4	4.2	1.4	1.0	2.1	2.7
24	3.4	2.9	1.2	1.2	1.9	2.9
25	4.8	3.9	1.6	1.1	1.8	2.9
26	6.3	4.2	1.9	1.2	1.6	3.1
27	5.0	4.2	1.9	1.2	1.6	3.0
28	4.9	3.7	1.9	1.0	1.5	2.9
29	5.2	3.5	1.7	.6	1.5	3.1
30	4.9	3.7	1.6	1.3	1.7	3.1
31		4.1		.7	2.2	
Mean	4.07	3.85	1.96	1.17	1.36	2.65
Runoff acre-feet	242	237	116	72	84	157

Total for period - 908 acre-feet

TABLE B-12

DAILY MEAN DISCHARGE OF NORTH FORK COTTONWOOD CREEK NEAR IGO

April 1 to September 30, 1959

In second feet

Day	April	May	June	July	August	Sept.
1	250	99	38	9.5	7.0	3.7
2	222	96	35	9.5	7.0	3.7
3	217	93	33	9.5	7.0	9.5
4	222	91	31	9.5	7.8	10
5	217	91	30	9.5	7.8	10
6	213	88	25	8.7	7.8	11
7	195	82	25	8.7	7.8	11
8	166	77	24	8.7	7.8	11
9	122	74	19	8.7	7.8	11
10	115	69	19	8.7	7.8	12
11	112	66	19	7.8	7.8	12
12	106	57	18	7.8	7.8	13
13	99	52	17	7.8	8.7	15
14	96	52	17	7.8	8.7	15
15	93	50	16	7.8	8.7	16
16	85	48	16	7.8	8.7	16
17	85	46	16	7.8	7.8	17
18	82	48	15	7.8	7.8	235
19	79	46	16	7.8	7.8	77
20	79	42	15	7.0	7.8	59
21	77	42	13	7.0	7.8	55
22	77	40	12	7.0	7.8	48
23	71	52	12	7.0	7.8	48
24	71	46	11	7.0	7.8	44
25	99	44	11	7.0	7.8	44
26	143	44	11	7.0	7.8	42
27	136	42	11	7.0	8.7	42
28	115	42	10	7.0	8.7	40
29	109	38	10	7.0	8.7	38
30	103	40	9.5	7.0	8.7	33
31		40		7.0	8.7	
Mean	129	59.3	18.5	7.9	8.0	33.7
Runoff acre-feet	7,648	3,644	1,100	486	491	2,007

Total for period - 15,376 acre-feet

TABLE B-13

DAILY MEAN DISCHARGE OF LITTLE LAST CHANCE CREEK NEAR CHILCOOT

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	32	12.0	7.8	1.8	0.6	0.9
2	35	14.0	7.5	1.7	0.6	0.9
3	36	15.0	6.8	1.7	0.7	0.8
4	38	13.0	6.5	1.5	0.7	0.8
5	39	11.0	6.1	1.5	0.7	0.8
6	38	14.0	5.8	1.5	0.7	0.9
7	35	11.0	5.5	1.5	0.7	1.0
8	32	9.6	5.2	1.3	0.9	1.0
9	29	11.0	4.9	1.3	1.8	0.8
10	28	10.0	4.9	1.3	1.0	0.9
11	27	8.9	4.6	1.3	0.7	1.0
12	26	8.5	4.3	1.5	0.7	1.0
13	25	8.5	4.0	2.8	1.2	1.1
14	24	9.3	3.8	2.8	1.0	1.3
15	22	8.9	3.7	3.2	1.0	1.6
16	21	8.5	3.5	2.3	0.9	1.8
17	21	8.2	3.5	1.9	0.9	2.1
18	21	7.8	3.4	1.6	0.8	2.4
19	19.0	7.5	3.0	1.4	1.7	2.4
20	17.0	7.1	2.8	1.2	2.7	1.8
21	15.0	6.8	2.7	0.6	1.5	1.6
22	13.0	8.5	2.2	0.4	1.3	1.9
23	13.0	17.0	2.1	1.3	1.5	
24	13.0	14.0	2.1	1.3	1.6	1.5
25	14.0	10.0	2.1	0.9	1.9	1.6
26	16.0	9.3	1.9	0.9	1.6	1.6
27	15.0	15.0	2.6	0.7	1.3	1.5
28	14.0	13.0	2.2	0.6	1.1	1.5
29	13.0	11.0	2.0	0.7	1.1	1.4
30	12.0	10.0	1.9	0.8	1.1	1.4
31		8.5		0.6	1.0	
Mean	23.4	10.5	4.0	1.4	1.1	1.4
Runoff acre-feet	1,394	648	237	87	69	81

Total for period - 2,516 acre-feet

TABLE B-14

DAILY MEAN DISCHARGE OF LITTLE TRUCKEE DITCH AT SUMMIT

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1		44	44	22	1.1	
2	N	38	46	20	1.0	
3		30	46	19.0	0.9	
4	O	29	46	17.0	0.8	
5		29	51	14.0	0.9	
6	F	28	50	13.0	0.9	
7		34	46	11.0	0.8	N
8	L	38	46	10.0	0.8	
9		39	47	9.2	0.7	O
10	O	40	48	8.3	0.6	
11	W	41	49	7.8	0.5	
12		42	50	7.4	0.4	
13		44	50	6.8	0.4	
14		43	50	6.5	0.4	F
15	10	41	50	6.2	0.4	
						L
16	25	39	50	5.5	0.4	
17	28	39	50	5.0		O
18	28	38	50	4.2	N	
19	28	37	50	3.7		W
20	37	37	50	3.4	O	
21	47	39	50	3.1		
22	46	38	49	2.9	F	
23	42	34	47	2.9		
24	40	33	44	2.6	L	
25	40	33	40	2.4		
					O	
26	25	33	36	2.0		
27	30	34	32	1.8	W	
28	39	38	31	1.4		
29	41	41	28	1.3		
30	44	42	24	1.2		
31	---	44	---	1.2		
Mean	18.3	37.4	45.0	7.2	0.4	O
Runoff acre-feet	1,089	2,295	2,673	441	22	O

Total for period - 6,520 acre-feet

TABLE B-15

DAILY MEAN DISCHARGE OF MIDDLE FORK FEATHER RIVER AT BECKWOURTH

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	98	22	85	0.7		
2	92	33	64	0.7		
3	73	45	49	0.6		
4	61	42	44	0.5		
5	72	34	35	0.9		
6	62	31	30	4.0		
7	26	35	23	4.7		
8	11.0	38	19.0	2.6	N	N
9	22	38	15.0	1.5		
10	40	39	11.0	1.0	0	0
11	41	35	8.8	0.9		
12	29	29	8.4	0.7		
13	38	24	7.5	0.5		
14	35	19.0	6.4	0.4		
15	29	17.0	5.2	0.4	F	F
16	21	16.0	3.7	0.4	L	L
17	17.0	15.0	3.0	0.3		
18	15.0	14.0	2.7	0.3	0	0
19	9.0	13.0	2.7	0.3		
20	9.0	13.0	2.4	0.2	W	W
21	5.0	11.0	2.0	0.2		
22	3.0	15.0	1.5	0.2		
23	2.0	30	1.3	0.2		
24	2.0	41	1.3	0.2		
25	0	48	1.3	0.1		
26	7.0	52	0.9	0.1		
27	17.0	94	0.8	0.1		
28	8.0	135	0.9	0.1		
29	10.0	134	0.9	0.1		
30	16.0	128	0.8	0.1		
31		113		0		
Mean	29.0	43.6	14.6	0.7	0	0
Runoff acre-feet	1,723	2,679	866	46	00	0

Total for period - 5,314 acre-feet

TABLE B-16

DAILY MEAN DISCHARGE OF NEW PINE CREEK BELOW SCHROEDER'S

April 1 to September 22, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	18.0	23	12.0	9.0	4.0
2		18.0	25	12.0	9.0	4.0
3	O	18.0	26	12.0	9.0	4.0
4		18.0	27	12.0	9.0	4.0
5		18.0	29	13.0	9.0	4.0
	R					
6		18.0	29	13.0	9.0	4.0
7	E	19.0	29	13.0	9.0	3.0
8		19.0	28	13.0	8.0	3.0
9	C	19.0	27	13.0	8.0	3.0
10		20	25	13.0	7.0	3.0
	O					
11		21	25	13.0	7.0	3.0
12	R	23	24	13.0	7.0	3.0
13		25	23	13.0	6.0	3.0
14	D	25	23	13.0	6.0	3.0
15		25	23	13.0	5.0	5.0
16	15.0	25	22	13.0	5.0	4.0
17	15.0	25	21	13.0	5.0	4.0
18	15.0	24	20	12.0	5.0	4.0
19	15.0	23	20	12.0	5.0	7.0
20	15.0	22	20	12.0	5.0	5.0
21	16.0	22	19.0	12.0	5.0	5.0
22	16.0	22	17.0	12.0	5.0	4.0
23	16.0	21	16.0	12.0	5.0	
24	16.0	21	15.0	12.0	5.0	N
25	19.0	21	15.0	12.0	5.0	O
26	21	23	16.0	11.0	5.0	R
27	19.0	23	15.0	10.0	5.0	E
28	19.0	23	14.0	10.0	5.0	C
29	17.0	23	14.0	10.0	4.0	O
30	18.0	23	13.0	10.0	4.0	R
31	---	23	---	10.0	---	D
Mean	16.8	21.5	21.4	12.1	6.2	3.9
Runoff acre-feet	500	1,325	1,275	742	385	168

Total for period - 4,395 acre-feet

TABLE B-17

DAILY MEAN DISCHARGE OF COTTONWOOD CREEK
BELOW LARKIN GARDEN DITCH

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1		4.0	6.0	1.0	0	0
2		4.0	6.0	1.0	0	0
3		4.0	6.0	0.8	0	0
4		4.0	6.0	0.8	0	0
5		4.0	6.0	0.6	0	0
6		4.0	6.0	0.6	0	0
7		4.0	6.0	0.6	0	0
8		5.0	6.0	0.4	0	0
9		5.0	5.0	0.4	0	0
10		5.0	5.0	0.3	0	0
11		5.0	4.0	0.2	0	0
12		5.0	4.0	0.2	0	0
13		6.0	4.0	0.2	0	0
14		6.0	3.0	0.2	0	0
15		6.0	3.0	0.2	0	0
16	4.0	6.0	3.0	0.2	0	0
17	4.0	6.0	3.0	0.2	0	0
18	4.0	6.0	3.0	0.2	0	0
19	4.0	6.0	3.0	0.2	0	0.1
20	4.0	5.0	2.0	0.2	0	0.1
21	4.0	5.0	2.0	0.2	0	0.1
22	4.0	5.0	2.0	0.1	0	0.1
23	4.0	5.0	2.0	0.1	0	0
24	4.0	5.0	2.0	0.1	0	
25	4.0	5.0	2.0	0.1	0	
26	4.0	5.0	2.0	0.1	0	
27	4.0	6.0	2.0	0.1	0	
28	4.0	7.0	1.0	0.1	0	
29	4.0	7.0	1.0	0.1	0	
30	4.0	7.0	1.0	0	0	
31	---	6.0	---	0	0	
Mean	4.0	5.3	3.6	0.3	0	0.1
Runoff acre-feet	119	323	212	16	0	---

Total for period - 671 acre-feet

TABLE B-18

DAILY MEAN DISCHARGE OF DAVIS CREEK
AT OLD FISH WHEEL

May 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	N	11.0	7.0	4.0	4.0
2			11.0	7.0	4.0	4.0
3	O	O	11.0	7.0	4.0	4.0
4			11.0	6.0	4.0	4.0
5			11.0	6.0	4.0	4.0
	R	R				
6			11.0	6.0	4.0	4.0
7	E	E	11.0	6.0	4.0	4.0
8			11.0	5.0	4.0	4.0
9	C	C	11.0	5.0	4.0	4.0
10			11.0	5.0	4.0	4.0
	O	O				
11			11.0	5.0	4.0	4.0
12	R	R	11.0	5.0	4.0	4.0
13			10.0	5.0	4.0	4.0
14	D	D	10.0	5.0	4.0	5.0
15			10.0	5.0	4.0	5.0
16			10.0	5.0	4.0	4.0
17			10.0	5.0	4.0	4.0
18			10.0	5.0	4.0	5.0
19			9.0	5.0	4.0	4.0
20			9.0	5.0	5.0	4.0
21			9.0	5.0	5.0	4.0
22			9.0	4.0	5.0	4.0
23			9.0	4.0	5.0	
24			8.0	4.0	4.0	N
25			8.0	4.0	4.0	O
26			8.0	4.0	4.0	R
27		12.0	8.0	4.0	4.0	E
28		12.0	8.0	4.0	4.0	C
29		12.0	8.0	4.0	4.0	O
30		12.0	8.0	4.0	4.0	R
31		12.0	---	4.0	4.0	D
Mean		12.0	9.8	5.0	4.1	4.1
Runoff acre-feet		119	581	307	254	180

Total for period - 1,441 acre-feet

TABLE B-19

DAILY MEAN DISCHARGE OF LINVILLE CREEK
AT OLD POWERHOUSE

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1		2.6	2.5	2.3	2.3	2.3
2	N	2.6	2.5	2.3	2.3	2.3
3		2.6	2.5	2.3	2.3	2.3
4	O	2.6	2.5	2.3	2.3	2.3
5		2.6	2.5	2.3	2.3	2.3
				2.3		2.3
6		2.6	2.5	2.3	2.3	2.3
7	R	2.6	2.5	2.3	2.3	2.3
8		2.6	2.5	2.3	2.3	2.3
9	E	2.6	2.5	2.3	2.3	2.3
10		2.6	2.5	2.3	2.3	2.3
	C					
11		2.5	2.4	2.3	2.3	2.3
12	O	2.5	2.4	2.3	2.3	2.3
13		2.5	2.4	2.3	2.3	2.3
14	R	2.5	2.4	2.3	2.3	2.3
15		2.5	2.4	2.3	2.3	2.3
	D					
16		2.5	2.4	2.3	2.3	2.3
17		2.5	2.4	2.3	2.3	2.3
18		2.5	2.4	2.3	2.3	2.3
19		2.5	2.4	2.3	2.3	2.3
20		2.5	2.4	2.3	2.3	2.3
21		2.5	2.4	2.3	2.3	N
22		2.5	2.4	2.3	2.3	O
23		2.5	2.4	2.3	2.3	
24		2.5	2.4	2.3	2.3	R
25		2.5	2.3	2.3	2.3	E
						C
26		2.5	2.3	2.3	2.3	O
27	2.6	2.5	2.3	2.3	2.3	R
28	2.6	2.5	2.3	2.3	2.3	D
29	2.6	2.5	2.3	2.3	2.3	
30	2.6	2.5	2.3	2.3	2.3	
31		2.5		2.3	2.3	
Mean	2.6	2.5	2.4	2.3	2.3	2.3
Runoff acre-feet	20	155	143	141	141	91

Total for period - 691 acre-feet

TABLE B-20

DAILY MEAN DISCHARGE OF LINVILLE CREEK
ABOVE RENNER HOUSE DITCH

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	1.6	1.1	0.8	0.8	0.8
2		1.4	0.8	0.8	0.8	0.8
3	O	1.3	0.8	0.8	0.8	0.8
4		1.2	0.8	1.1	0.8	0.8
5		1.3	0.8	1.4	0.8	0.8
	R					
6		1.3	0.8	1.4	0.8	0.8
7	E	0.9	0.8	1.7	0.8	0.8
8		0.9	0.8	1.7	0.8	0.8
9	C	0.8	0.8	1.7	0.8	0.8
10		0.8	0.8	1.7	0.8	0.8
	O					
11		0.8	0.8	1.7	0.8	0.8
12	R	0.8	0.8	1.4	0.8	0.8
13		0.8	0.8	1.4	0.8	0.8
14	D	0.8	0.8	1.4	0.8	0.8
15		0.8	0.8	1.3	0.8	0.8
16		0.8	0.8	1.1	0.8	0.8
17		0.8	0.8	1.1	0.8	0.8
18		0.8	0.8	1.1	0.8	0.8
19		1.0	0.8	1.1	0.8	0.8
20		1.0	0.8	1.0	0.8	0.8
21		1.0	0.8	1.0	0.8	
22		1.0	0.8	0.8	0.8	N
23		1.2	0.8	0.8	0.8	O
24		1.1	0.8	0.8	0.8	
25		1.1	0.8	0.8	0.8	R
						E
26		1.3	0.8	0.8	0.8	C
27	1.1	1.3	0.8	0.8	0.8	O
28	1.1	1.5	0.8	0.8	0.8	R
29	1.1	1.2	0.8	0.8	0.8	D
30	1.1	1.1	0.8	0.8	0.8	
31		1.1		0.8	0.8	
Mean	1.1	1.1	0.8	1.1	0.8	0.8
Runoff acre-feet	9	65	48	69	50	32

Total for period - 273 acre-feet

TABLE B-21

DAILY MEAN DISCHARGE OF FRANKLIN CREEK
ABOVE DIVERSIONS

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	3.5	2.9	2.5	2.3	2.2
2	O	3.5	2.8	2.5	2.3	2.2
3		3.5	2.8	2.5	2.3	2.2
4	R	3.7	2.7	2.5	2.3	2.2
5	E	4.0	2.7	2.5	2.3	2.2
	C					
6	O	4.0	2.7	2.5	2.3	2.2
7	R	3.9	2.7	2.5	2.3	2.2
8	D	3.8	2.7	2.5	2.3	2.2
9		3.8	2.6	2.5	2.3	2.2
10		3.8	2.6	2.5	2.3	2.3
11		3.7	2.6	2.5	2.2	2.4
12		3.4	2.6	2.5	2.2	2.4
13		3.4	2.6	2.5	2.2	2.4
14		3.7	2.6	2.4	2.2	2.6
15		3.7	2.6	2.3	2.2	2.6
16		3.6	2.6	2.3	2.2	2.4
17		3.4	2.6	2.3	2.2	2.4
18		3.3	2.6	2.3	2.2	2.6
19	3.4	3.2	2.6	2.3	2.2	2.6
20	3.4	3.1	2.6	2.3	2.2	2.5
21	3.4	3.1	2.6	2.3	2.2	2.4
22	3.4	3.2	2.6	2.3	2.2	2.4
23	3.4	3.3	2.5	2.3	2.2	
24	3.4	2.9	2.5	2.3	2.2	
25	3.4	2.9	2.7	2.3	2.2	N
						O
26	3.4	3.6	2.9	2.3	2.2	R
27	3.4	3.6	2.8	2.3	2.2	E
28	3.4	3.5	2.6	2.3	2.2	C
29	3.3	3.3	2.6	2.3	2.2	O
30	3.3	3.2	2.5	2.3	2.2	R
31		3.1		2.3	2.2	D
Mean	3.4	3.5	2.6	2.5	2.2	2.4
Runoff acre-feet	74	214	153	147	133	103

Total for period - 824 acre-feet

TABLE B-22

DAILY MEAN DISCHARGE OF JOSEPH CREEK
BELOW COUCH CREEK

April 1 to September 30 , 1959

In second-feet

Day	April	May	June	July	August	September
1	N	2.5	1.6	1.2	0.8	0.8
2	O	2.2	1.6	1.2	0.8	0.8
3		2.2	1.7	1.2	0.8	0.8
4	R	2.0	1.7	1.2	0.8	0.8
5	E C	2.4	1.6	1.1	0.8	0.8
6	O	2.4	1.6	1.0	0.8	0.8
7	R	2.2	1.5	1.0	0.8	0.8
8	D	2.2	1.4	1.0	0.8	0.8
9		2.2	1.4	1.0	0.8	0.8
10		2.2	1.3	1.0	0.8	0.8
11		2.1	1.3	1.0	0.8	0.8
12		2.1	1.3	1.0	0.8	0.8
13		2.1	1.1	1.0	0.8	0.8
14		2.2	1.1	0.9	0.8	0.9
15		1.9	1.1	0.9	0.8	1.0
16		1.5	1.1	0.9	0.8	0.9
17	1.8	1.6	1.1	0.9	0.8	0.9
18	1.8	1.6	1.1	0.9	0.8	1.0
19	1.8	1.5	1.1	0.9	0.8	1.0
20	1.6	1.5	1.1	0.9	1.0	1.0
21	1.5	1.5	1.1	0.9	1.0	1.0
22	1.5	1.8	1.1	0.9	0.8	1.0
23	1.5	1.8	1.1	0.9	0.8	N
24	1.6	1.8	1.1	0.9	0.8	N
25	2.0	1.8	1.2	0.9	0.8	O
26	2.5	2.5	1.4	0.9	0.8	R
27	2.0	2.5	1.3	0.9	0.8	E
28	2.0	2.2	1.3	0.8	0.8	C
29	1.7	2.1	1.3	0.8	0.8	O
30	1.7	2.0	1.3	0.8	0.8	R
31		1.8		0.8	0.8	D
Mean	1.8	2.0	1.3	1.0	0.8	0.9
Runoff acre-feet	50	125	77	59	50	38

Total for period - 399 acre-feet

TABLE B-23

DAILY MEAN DISCHARGE OF THOMS CREEK
AT CEDARVILLE-ALTURAS HIGHWAY

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	6.0	5.0	2.0	0.0	0.0
2	O	6.0	4.0	2.0		
3		6.0	4.0	2.0		
4	R	6.0	4.0	2.0	D	D
5	E	6.0	4.0	2.0	R	R
	C				Y	Y
6	O	6.0	4.0	2.0		
7	R	7.0	4.0	2.0		
8	D	6.0	4.0	2.0	A	A
9		6.0	3.0	2.0	T	T
10		6.0	3.0	2.0		
11		5.0	3.0	1.0	R	R
12		5.0	3.0	1.0	E	E
13		5.0	3.0	1.0	C	C
14	6.0	5.0	3.0	1.0	O	O
15	6.0	6.0	3.0	0.8	R	R
					D	D
16	6.0	6.0	3.0	0.8	E	E
17	6.0	6.0	2.0	0.6	R	R
18	5.0	6.0	2.0	0.6		
19	5.0	6.0	2.0	0.5		
20	5.0	6.0	2.0	0.4		
21	5.0	6.0	2.0	0.3		
22	5.0	6.0	2.0	0.2		
23	5.0	6.0	2.0	0.1		
24	5.0	6.0	2.0	0		
25	6.0	5.0	2.0	0		
26	6.0	6.0	2.0	0		
27	7.0	6.0	3.0	0		
28	6.0	6.0	3.0	0		
29	6.0	5.0	3.0	0		
30	6.0	5.0	2.0	0		
31	---	5.0	---	0		
				0		
Mean	5.4	5.8	2.9	0.9	---	---
Runoff acre-feet	180	354	170	56	0	0

Total for period - 760 acre-feet

TABLE B-24

DAILY MEAN DISCHARGES OF GLEASON CREEK NEAR JONES RANCH

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	0.4	0.3	N	N	N
2		0.4	0.3			
3	O	0.4	0.3	O	O	O
4		0.4	0.3			
5		0.4	0.3			
	R			F	F	F
6		0.4	0.2			
7	E	0.4	0.2	L	L	L
8		0.4	0.2			
9	C	0.3	0.2	O	O	O
10		0.3	0.2			
	O			W	W	W
11		0.3	0.2			
12	R	0.3	0.2			
13		0.3	0.2			
14	D	0.3	0.2			
15		0.3	0.2			
16		0.3	0.2			
17	0.3	0.3	0.1			
18	0.3	0.3	0.1			
19	0.3	0.3	0.1			
20	0.3	0.3	0.1			
21	0.3	0.3	0.1			
22	0.3	0.3	0.1			
23	0.3	0.3	0.1			
24	0.3	0.3	0.1			
25	0.3	0.3	0.1			
26	0.3	0.3	0.1			
27	0.3	0.3	0			
28	0.3	0.3	0			
29	0.3	0.3	0			
30	0.3	0.3	0			
31	---	0.3	---			
Mean	0.3	0.3	0.2	0	0	0
Runoff acre-feet	8.3	20	9.3	---	---	---

Total for period - 38 acre-feet

TABLE B-25

DAILY MEAN DISCHARGE OF PARKER CREEK AT FOGARTY RANCH

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	10.0	7.0	4.0	2.0	2.0
2		10.0	7.0	4.0	2.0	2.0
3	O	10.0	8.0	4.0	2.0	2.0
4		9.0	8.0	3.0	2.0	2.0
5		10.0	9.0	3.0	2.0	2.0
	R					
6		10.0	10.0	3.0	2.0	2.0
7	E	10.0	9.0	3.0	2.0	2.0
8		9.0	9.0	3.0	2.0	2.0
9	C	10.0	9.0	3.0	2.0	2.0
10	O	10.0	8.0	3.0	2.0	2.0
	R					
11		10.0	7.0	3.0	2.0	2.0
12	D	10.0	7.0	3.0	2.0	2.0
13		9.0	7.0	3.0	2.0	2.0
14	9.0	10.0	6.0	3.0	1.0	2.0
15	12.0	10.0	6.0	3.0	1.0	3.0
16	18.0	9.0	6.0	3.0	1.0	3.0
17	18.0	10.0	6.0	3.0	1.0	3.0
18	18.0	9.0	6.0	3.0	1.0	3.0
19	18.0	9.0	5.0	3.0	2.0	3.0
20	18.0	9.0	5.0	2.0	2.0	3.0
21	15.0	9.0	5.0	2.0	3.0	3.0
22	14.0	9.0	5.0	2.0	3.0	
23	13.0	10.0	5.0	2.0	3.0	N
24	12.0	10.0	4.0	2.0	2.0	O
25	11.0	10.0	4.0	2.0	2.0	
						R
26	10.0	17.0	4.0	2.0	2.0	E
27	9.0	14.0	4.0	2.0	2.0	C
28	8.0	13.0	4.0	2.0	2.0	O
29	8.0	12.0	4.0	2.0	2.0	R
30	8.0	8.0	4.0	2.0	2.0	D
31	---	8.0	---	---	---	
Mean	13	10	6.3	2.7	1.9	2.3
Runoff acre-feet	434	620	372	167	119	97

Total for period - 1,809 acre-feet

TABLE B-26

DAILY MEAN DISCHARGE OF SHIELDS CREEK ABOVE DIVERSIONS

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	3.7	3.7	3.1	2.4	2.3
2		3.7	3.7	3.1	2.4	2.3
3	O	3.7	3.6	3.1	2.4	2.2
4		3.7	3.5	3.1	2.4	2.2
5		3.7	3.5	3.1	2.4	2.2
	R					
6		3.5	3.5	3.1	2.4	2.1
7	E	3.5	3.4	3.0	2.4	2.1
8		3.5	3.4	3.0	2.4	2.1
9	C	3.3	3.4	2.9	2.4	2.1
10		3.3	3.3	2.9	2.4	2.0
	O					
11		3.3	3.3	2.9	2.4	2.0
12	R	3.3	3.3	2.9	2.4	2.0
13		3.3	3.3	2.8	2.4	2.0
14	D	3.4	3.3	2.8	2.4	2.0
15		3.4	3.3	2.8	2.4	1.9
16		3.5	3.3	2.7	2.4	1.9
17		3.5	3.3	2.7	2.4	1.9
18		3.5	3.3	2.7	2.4	
19		3.5	3.2	2.7	2.4	N
20		3.5	3.2	2.7	2.4	
						O
21		3.7	3.2	2.7	2.4	
22		3.7	3.2	2.7	2.4	R
23		3.7	3.2	2.6	2.4	
24		3.7	3.2	2.6	2.4	E
25	3.7		3.2	2.6	2.3	
						C
26	3.7	3.8	3.2	2.6	2.3	
27	3.7	3.8	3.2	2.6	2.3	O
28	3.7	3.8	3.2	2.6	2.3	
29	3.7	3.9	3.2	2.6	2.3	R
30	3.7	3.9	3.2	2.5	2.3	
31		3.9		2.5	2.3	D
Mean	3.7	3.5	3.3	2.8	2.4	2.1
Runoff acre-feet	44	214	198	172	147	69

Total for period - 844 acre-feet

TABLE B-27

DAILY MEAN DISCHARGE OF SHIELDS CREEK BELOW PEPPERDINE RANCH

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	2.9	2.2	1.5	1.6	1.6
2		2.9	2.4	2.2	1.6	1.6
3	O	2.6	2.6	1.8	1.8	1.6
4		2.3	2.2	1.8	1.9	1.5
5		2.3	2.0	1.8	2.0	1.5
	R					
6		2.6	2.3	1.8	1.8	1.5
7	E	2.6	2.2	1.8	1.8	1.5
8		2.8	2.3	1.8	1.5	1.5
9	C	2.4	2.4	1.8	1.4	1.5
10		2.4	1.8	1.8	1.2	1.5
	O					
11		2.6	1.6	1.5	1.2	1.3
12	R	2.6	1.4	1.5	1.4	1.3
13		2.6	1.8	1.5	1.8	1.3
14	D	2.4	2.0	1.5	1.5	1.3
15		2.6	1.8	1.5	1.5	1.3
16		2.9	1.3	1.5	1.5	1.3
17		2.9	1.3	1.5	1.2	1.3
18		2.3	1.3	1.4	1.2	1.4
19		2.4	1.8	1.4	1.4	1.5
20		2.8	2.2	1.4	1.8	1.5
21		2.3	1.8	1.4	1.8	1.5
22		2.9	1.8	1.4	1.9	N
23		2.8	1.8	1.4	1.8	O
24		2.6	1.5	1.4	1.8	
25		4.0	1.6	1.6	1.5	R
						E
26		4.6	2.3	1.6	1.5	C
27	2.3	2.6	2.8	1.6	1.5	O
28	2.3	2.9	1.8	1.6	1.6	R
29	2.4	3.0	1.7	1.6	1.6	D
30	2.2	3.0	1.5	1.6	1.6	
31	---	1.8	---	1.6	1.6	
Mean	2.3	2.7	1.9	1.6	1.6	1.4
Runoff acre-feet	18	167	113	99	97	59

Total for period - 553 acre-feet

TABLE B-28

DAILY MEAN DISCHARGE OF PARKER CREEK ABOVE HIGHWAY 395

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	20	8.0	3.0	1.0	0.2
2		20	8.0	3.0	1.0	0.2
3	O	20	9.0	3.0	1.0	0.2
4		19.0	9.0	2.0	1.0	0.2
5		25	9.0	2.0	1.0	0.2
	R					
6		20	10.0	2.0	0.7	0.2
7	E	19.0	9.0	2.0	0.5	0.2
8		20	7.0	1.0	0.5	0.2
9	C	20	6.0	1.0	0.5	0.2
10		20	6.0	1.0	0.5	0.2
	O					
11		14.0	4.0	0.8	0.5	N
12	R	10.0	3.0	0.8	0.4	
13		13.0	3.0	0.8	0.4	O
14	D	20	2.0	0.8	0.4	
15	2.0	17.0	2.0	0.8	0.4	
						R
16	3.0	16.0	2.0	0.8	0.4	
17	4.0	16.0	2.0	0.8	0.4	E
18	7.0	14.0	2.0	1.0	0.4	
19	13.0	14.0	2.0	0.8	0.3	C
20	13.0	13.0	2.0	0.8	0.3	
						O
21	12.0	12.0	2.0	0.8	0.3	
22	9.0	12.0	2.0	0.8	0.3	R
23	8.0	11.0	1.0	0.8	0.3	
24	8.0	11.0	2.0	0.8	0.3	D
25	8.0	21	2.0	0.8	0.3	
26	8.0	22	2.0	0.8	0.3	
27	7.0	18.0	2.0	0.8	0.3	
28	7.0	18.0	2.0	0.8	0.2	
29	7.0	18.0	3.0	1.0	0.2	
30	9.0	14.0	3.0	1.0	0.2	
31	---	10.0	---	1.0	0.2	
Mean	7.8	17	4.2	1.1	0.5	0.2
Runoff acre-feet	248	1,024	249	67	30	4.0

Total for period - 1,622 acre-feet

TABLE B-29

DAILY MEAN DISCHARGE OF NORTH FORK PIT BELOW THOMS CREEK

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	10.0	7.0	2.0	1.0	1.0
2	O	11.0	6.0	2.0	1.0	1.0
3		11.0	5.0	1.0	1.0	1.0
4	R	10.0	5.0	1.0	1.0	1.0
5	E C	12.0	6.0	1.0	1.0	1.0
6	O	14.0	7.0	1.0	1.0	1.0
7	R	12.0	7.0	1.0	1.0	1.0
8	D	11.0	7.0	1.0	1.0	1.0
9		11.0	7.0	1.0	1.0	1.0
10		11.0	7.0	1.0	1.0	1.0
11		9.0	7.0	1.0	1.0	1.0
12		7.0	5.0	1.0	1.0	1.0
13		6.0	5.0	1.0	1.0	1.0
14		7.0	5.0	1.0	1.0	1.0
15	10.0	9.0	5.0	1.0	1.0	1.0
16	9.0	9.0	4.0	1.0	1.0	1.0
17	9.0	10.0	3.0	1.0	1.0	1.0
18	9.0	10.0	2.0	1.0	1.0	1.0
19	9.0	10.0	2.0	1.0	1.0	1.0
20	8.0	8.0	2.0	1.0	1.0	1.0
21	7.0	7.0	2.0	1.0	1.0	1.0
22	6.0	7.0	1.0	1.0	1.0	1.0
23	6.0	7.0	1.0	1.0	1.0	N
24	5.0	8.0	1.0	1.0	1.0	O
25	5.0	7.0	1.0	1.0	1.0	
26	7.0	12.0	2.0	1.0	1.0	R E C O R D
27	8.0	14.0	2.0	1.0	1.0	
28	8.0	14.0	2.0	1.0	1.0	
29	7.0	12.0	2.0	1.0	1.0	
30	7.0	10.0	2.0	1.0	1.0	
31	---	8.0	---	1.0	1.0	
Mean	7.5	9.8	4.0	1.1	1.0	1.0
Runoff acre-feet	238	602	238	65	61	44

Total for period - 1,248 acre-feet

TABLE B-30

DAILY MEAN DISCHARGE OF PARKER CREEK AND NORTH FORK PIT RIVER

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	30	15.0	5.0	2.0	1.0
2	O	31	14.0	5.0	2.0	1.0
3		31	14.0	4.0	2.0	1.0
4	R	29	14.0	3.0	2.0	1.0
5	E	37	15.0	3.0	2.0	1.0
	C					
6	O	34	17.0	3.0	2.0	1.0
7	R	31	16.0	3.0	2.0	1.0
8	D	31	14.0	2.0	2.0	1.0
9		31	13.0	2.0	2.0	1.0
10		31	13.0	2.0	2.0	1.0
11		23	11.0	2.0	1.0	N
12		17.0	8.0	2.0	1.0	O
13		19.0	8.0	2.0	1.0	
14		27	7.0	2.0	1.0	R
15	12.0	26	7.0	2.0	1.0	E
						C
16	12.0	25	6.0	2.0	1.0	O
17	13.0	26	5.0	2.0	1.0	R
18	16.0	24	4.0	2.0	1.0	D
19	22	24	4.0	2.0	1.0	
20	21	21	4.0	2.0	1.0	
21	19.0	19.0	4.0	2.0	1.0	
22	15.0	19.0	3.0	2.0	1.0	
23	13.0	18.0	2.0	2.0	1.0	
24	13.0	19.0	3.0	2.0	1.0	
25	13.0	28	3.0	2.0	1.0	
26	15.0	34	4.0	2.0	1.0	
27	15.0	32	4.0	2.0	1.0	
28	15.0	32	4.0	2.0	1.0	
29	14.0	30	5.0	2.0	1.0	
30	16.0	24	5.0	2.0	1.0	
31	---	18.0	---	2.0	1.0	
Mean	15	26	8.2	2.4	1.3	1.0
Runoff acre-feet	483	1,626	487	146	81	20

Total for period - 2,843 acre-feet

TABLE B-31

DAILY MEAN DISCHARGE OF NORTH FORK PIT RIVER NEAR ALTURAS

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	12	8.2	1.7	0.1	0.6	0.9
2	17.0	17.0	5.6	.2	.6	.9
3	22	20	1.7	.4	.7	.9
4	26	20	.4	.7	.7	.9
5	31	20	.1	.7	.4	.9
6	26	21	0	1.7	.7	.7
7	20	20	5.1	.7	.9	.7
8	15.0	13.0	4.3	2.3	.9	.7
9	10.0	15.0	3.1	2.3	.9	.7
10	7.8	13.0	2.7	2.3	.9	.6
11	7.8	13.0	2.7	2.3	.9	.4
12	7.3	10.0	.9	2.3	.9	.4
13	7.3	8.2	1.4	2.0	1.1	.4
14	7.3	9.7	.6	.9	1.1	.6
15	6.5	12.0	1.7	.7	1.4	.6
16	5.6	13.0	2.7	.9	1.7	.6
17	5.6	16.0	2.3	1.7	1.7	.6
18	5.6	7.8	2.3	.9	1.7	.9
19	6.9	.9	1.4	.2	1.7	.9
20	6.5	.2	1.1	.2	1.4	.9
21	5.2	.1	.7	.1	1.4	.9
22	5.6	.1	.4	.1	1.4	.7
23	6.0	.4	.2	.1	1.1	.1
24	6.0	.9	.1	.1	1.1	.1
25	6.0	1.4	.1	.1	1.1	.1
26	7.3	16.0	.1	.1	1.1	.6
27	6.9	13.0	.1	.4	.9	.9
28	7.8	29	.1	.4	.9	3.1
29	7.3	27	.1	.2	.9	5.2
30	6.9	8.9	.1	.4	.9	4.7
31		5.0		.4	.9	
Mean	10.6	11.6	1.46	0.84	1.04	1.02
Runoff acre-feet	631	714	87	51	64	61

Total for period - 1,608 acre-feet

TABLE B-32

DAILY MEAN DISCHARGE OF SHACKLEFORD CREEK ABOVE ALL DIVERSIONS

April 1, 1959, to September 30, 1959

In second feet

Day	April	May	June	July	August	September
1	74	86	78	22	9.0	15.0
2	95	76	80	21	8.7	14.0
3	105	72	78	19.0	8.7	14.0
4	115	68	78	19.0	8.4	13.0
5	131	71	82	18.0	7.9	12.0
6	123	72	76	17.0	7.6	12.0
7	100	78	68	16.0	7.1	11.0
8	88	84	66	15.0	6.8	11.0
9	86	82	61	14.0	6.3	9.9
10	89	81	58	14.0	6.1	9.6
11	93	88	58	13.0	6.1	8.7
12	93	106	59	12.0	5.9	8.2
13	86	126	59	12.0	5.6	9.0
14	81	124	53	12.0	5.4	9.3
15	77	97	49	11.0	4.7	6.3
16	72	85	47	11.0	4.5	4.1
17	72	84	45	11.0	4.1	3.6
18	68	75	48	11.0	4.1	14.0
19	70	71	51	11.0	5.4	11.0
20	72	69	54	12.0	6.8	8.2
21	81	70	53	12.0	6.1	6.3
22	85	71	47	12.0	5.2	5.4
23	95	77	42	12.0	4.3	4.7
24	104	84	38	12.0	3.7	4.3
25	107	84	36	12.0	3.6	4.1
26	95	81	35	11.0	3.7	4.3
27	82	74	31	11.0	19.0	4.5
28	79	71	28	11.0	19.0	4.1
29	85	71	26	10.0	18.0	3.9
30	95	71	24	9.9	17.0	
31	---	73	---	9.3	16.0	
Mean	89.9	81.4	53.6	13.3	7.9	8.3
Runoff acre-feet	5,351	5,002	3,189	820	486	495

Total for period - 15,343 acre-feet

TABLE B-33

DAILY MEAN DISCHARGE OF RALPH EASTLICK DITCH

July 1 to September 30, 1959

In second-feet

Day	July	August	September
1	N	N	2.9
2	O	O	3.0
3			3.0
4	R	F	1.0
5	E	L	
	C	O	
	O		
6	R	W	N
7	D		O
8	1.8		
9	1.8		F
10	1.6		L
			O
11	1.5		W
12	1.5		
13	1.4		
14	1.3		
15	1.6		
16	1.6		
17	1.6		
18	1.6		
19	1.6		
20	0.8		
21	N		
22	O		
23			
24	F		
25	L		
	O		
26	W		
27		1.2	
28		3.6	
29		3.5	
30		3.1	
31		2.9	
Mean	0.8	0.5	0.3
Runoff acre-feet	39	28	20

Total for period - 87 acre-feet

TABLE B-34

DAILY MEAN DISCHARGE OF SHACKLEFORD DITCH

July 1 to September 30, 1959

In second-feet

Day	July	August	September
1	N	6.3	8.2
2	O	6.1	7.8
3		5.4	7.6
4	R	3.9	8.7
5	E	3.9	9.8
	C		
6	O R	3.9	9.6
7	D	3.9	9.1
8	6.7	3.8	8.7
9	6.5	3.8	8.2
10	6.5	3.8	8.0
11	6.5	3.6	7.4
12	6.5	3.8	6.3
13	6.5	3.1	6.3
14	6.5	3.1	6.5
15	6.3	3.3	6.1
16	6.3	3.3	4.6
17	6.3	3.3	4.1
18	6.3	3.3	7.6
19	6.3	3.4	7.8
20	7.6	3.6	7.0
21	8.2	3.9	5.9
22	8.4	4.3	5.4
23	8.4	4.1	4.6
24	8.2	4.1	N
25	8.0	2.2	O
26	7.8	2.2	R
27	7.6	6.5	E
28	7.2	8.2	C
29	7.0	8.2	O
30	6.7	8.2	R
31	6.5	8.0	D
Mean	7.0	4.5	7.2
Runoff acre-feet	334	274	327

Total for period - 935 acre-feet

TABLE B-35

DAILY MEAN DISCHARGE OF HOWARD JONES DITCH

July 1 to September 30, 1959

In second-feet

Day	July	August	September
1	N	N	N
2	O	O	O
3	R		
4	E	F	F
5	C	L	L
	O	O	O
6	R	W	W
7	D		
8	3.8		
9	3.8		
10	3.7		
11	3.6		
12	3.4		
13	3.3		
14	3.3		
15	2.6		
16	2.3		
17	2.1		
18	1.9		
19	1.8		
20	0.7		
21	0.3		
22	0.3		
23	0.1		
24			
25	N		
	O		
26			
27	F		
28	L		
29	O		
30	W		
31			
Mean	2.3		
Runoff acre-feet	73		

Total for period - 73 acre-feet

TABLE B-36

DAILY MEAN DISCHARGE OF CAMP DITCH

July 1 to September 30, 1959

In second-feet

Day	July	August	September
1	N	1.5	2.7
2	O	1.5	2.3
3	R	2.3	2.0
4	E	2.7	2.2
5	C	2.4	2.5
6	O R D	2.2	2.2
7		2.0	1.9
8	2.3	1.9	1.9
9	2.1	1.7	1.9
10	2.0	1.5	1.6
11	2.0	1.3	2.2
12	2.0	1.7	2.2
13	1.9	2.6	2.7
14	1.8	2.1	2.7
15	1.5	1.9	1.6
16	1.4	1.7	1.2
17	1.3	1.5	1.2
18	1.1	1.9	4.2
19	0.8	2.7	2.9
20	1.6	3.9	1.5
21	2.9	3.1	1.2
22	2.9	2.0	1.1
23	3.1	1.6	1.6
24	3.1	1.5	2.0
25	3.0	2.2	1.9
26	2.7	2.3	1.8
27	2.3	4.7	1.6
28	2.2	2.7	1.5
29	2.0	2.7	1.3
30	1.9	2.9	1.3
31	1.7	3.1	
Mean	2.1	2.2	2.0
Runoff, acre-feet	98	138	117

Total for period - 353 acre-feet

TABLE B-37

DAILY MEAN DISCHARGE OF PARKS CREEK ABOVE
EDSON-FOULKE YREKA DITCH

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	NO	46	29	6.5	3.7	3.5
2		40	29	6.5	3.7	3.5
3	RECORD	38	30	6.5	3.7	3.5
4		35	30	6.3	3.7	3.7
5		34	33	6.1	3.7	3.7
6	110	37	33	6.0	3.7	3.7
7	90	39	29	5.8	3.8	3.7
8	82	41	28	5.6	3.7	3.7
9	72	41	26	5.5	3.7	3.5
10	75	41	25	5.4	3.7	3.5
11	75	41	73	5.4	3.7	3.5
12	56	45	23	5.4	3.7	3.3
13	52	58	23	5.4	3.7	3.3
14	49	85	22	5.4	3.7	3.5
15	46	89	21	5.2	3.7	3.5
16	40	52	20	4.9	3.7	3.5
17	39	44	19.0	4.9	3.7	3.5
18	37	41	14.0	4.9	3.7	4.3
19	36	36	11.5	4.7	3.7	3.7
20	38	33	11.0	4.0	3.9	3.5
21	41	33	10.7	3.8	4.0	3.5
22	50	32	10.0	3.8	3.8	3.5
23	58	33	9.7	3.8	3.8	
24	75	33	9.1	3.9	3.8	N
25	89	33	8.8	3.9	3.8	O
26	60	33	8.8	3.9	3.7	R
27	46	30	8.2	3.8	3.7	E
28	45	29	8.0	3.8	3.7	C
29	49	29	6.6	3.7	3.5	O
30	50	29	6.5	3.7	3.5	R
31	---	29	---	3.7	3.5	D
Mean	58	41	19	4.9	3.7	3.6
Runoff acre-feet	2,891	2,493	1,125	301	228	156

Total for period - 7,194 acre-feet

TABLE B-38

DAILY MEAN DISCHARGE OF SHASTA RIVER AT EDGEWOOD BRIDGE

October 1, 1958 to September 30, 1959

In second-feet

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.6	27	34	37	82	90	54	46	27	20	7.7	11.2
2	19.2	28	33	36	77	91	54	44	25	19.5	8.7	10.8
3	19.2	28	34	34	75	92	53	45	25	18.0	8.7	10.8
4	18.6	29	33	32	74	88	53	40	26	17.5	8.7	11.2
5	18.6	28	33	27	77	82	53	37	31	16.8	8.7	12.4
6	18.0	28	33	57	75	82	53	40	43	13.8	9.2	11.2
7	17.5	28	33	345	73	80	54	37	35	13.8	9.2	11.2
8	18.0	28	34	675	72	78	62	35	33	12.8	9.7	10.8
9	19.2	32	34	625	70	75	55	36	30	13.4	10.5	10.8
10	19.2	43	34	390	72	78	53	36	30	12.3	11.0	10.4
11	19.2	36	34	505	73	72	53	40	28	11.8	10.5	10.8
12	18.6	36	34	750	68	73	48	40	27	11.8	10.5	9.8
13	18.0	38	33	390	65	73	43	50	29	12.3	11.0	9.8
14	17.5	42	32	250	67	69	34	82	29	10.6	10.5	11.4
15	17.5	38	32	180	275	67	35	68	27	10.6	10.0	12.8
16	18.0	36	31	150	725	67	35	57	27	9.2	10.0	14.0
17	18.6	34	31	130	420	67	34	53	26	9.2	10.5	15.4
18	21	35	31	107	440	60	30	47	24	9.2	10.0	35
19	23	37	31	102	230	56	30	44	24	9.2	11.5	26
20	24	37	32	91	250	52	28	42	27	9.2	14.2	24
21	24	35	33	89	210	56	25	40	27	8.7	15.2	21
22	23	35	32	84	155	57	26	32	26	8.7	14.0	21
23	24	35	32	78	107	60	28	31	24	8.7	14.2	21
24	25	35	33	125	99	53	35	32	24	8.7	13.2	21
25	26	35	39	110	92	50	45	32	24	9.2	13.2	21
26	26	36	67	92	90	55	53	32	25	9.2	13.2	20
27	26	35	67	115	88	49	44	33	25	8.7	13.8	20
28	27	35	35	125	90	49	41	31	24	7.7	13.8	20
29	27	35	34	99		54	39	28	23	7.7	13.2	20
30	26	35	33	94		77	37	28	21	7.7	14.2	20
31	25		34	87		50		27		7.7	13.2	
Mean	21	35	35	194	153	68	43	41	27	11.4	11.3	16.2
Runoff ac.-ft.	1,310	2,018	2,168	11,902	8,496	4,152	2,548	2,505	1,616	700	697	960

Total for period - 39,072 acre-feet

TABLE B-39

DAILY MEAN DISCHARGE OF SHASTA RIVER AT MONTAGUE-GRENADA HWY. BRIDGE

June 1 , to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	N	N	22	26	44
2				24	25	52
3	O	O	O	21	31	60
4				23	29	57
5				39	28	56
6	R	R	R	44	30	72
7				65	33	127
8	E	E	E	54	35	145
9				59	27	122
10	C	C	C	50	35	127
11	O	O	O	36	32	120
12				29	27	112
13	R	R	R	32	21	93
14	D			25	32	96
15		D	D	18.6	35	109
16				22	26	114
17			50	17.7	29	127
18			35	28	33	153
19			37	32	35	140
20			38	27	53	127
21			36	25	80	145
22			34	25	100	140
23			29	21	120	124
24			29	21	90	119
25			29	25	50	135
26			27	17.7	50	162
27			35	27	48	174
28			31	26	50	220
29			30	34	43	230
30			26	34	43	230
31				29	44	
Mean			33	31	43	117
Runoff acre-feet			922	1,889	2,653	6,934

Total for period - 12,398 acre-feet

TABLE B-40

DAILY MEAN DISCHARGE OF LITTLE SHASTA RIVER NEAR MONTAGUE

October 1, 1958 to September 30, 1959

In second-feet

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	4.5	5.1	6.4	7.8	12.0	15.0	11.0	5.1	2.6	2.1	1.9
2	5.7	4.5	5.1	5.4	7.8	13.0	18.0	12.0	5.1	2.4	1.7	2.1
3	5.4	5.1	5.1	9.2	7.1	12.0	18.0	10.0	4.8	2.4	2.1	2.1
4	5.4	4.8	5.1	9.4	7.8	10.0	18.0	9.0	4.8	2.2	2.1	1.9
5	5.4	5.1	4.8	14.0	7.8	9.8	16.0	11.0	5.7	2.4	2.1	2.1
6	5.4	4.8	5.1	8.2	7.1	9.8	14.0	12.0	6.7	2.4	2.1	2.1
7	5.4	5.4	5.7	7.1	6.7	9.0	12.0	9.4	5.1	2.4	1.7	1.9
8	5.4	5.1	8.2	6.7	6.1	8.6	11.0	8.6	4.8	2.1	1.9	2.1
9	5.4	6.4	6.7	9.0	5.7	7.8	11.0	9.0	4.8	2.1	1.9	2.1
10	5.1	6.7	6.1	11.0	5.7	7.1	10.0	8.2	4.5	2.1	1.9	2.1
11	5.1	4.8	6.1	13.0	6.1	6.7	11.0	7.8	4.5	2.1	1.7	1.7
12	5.1	4.3	7.1	41	6.1	7.8	11.0	7.4	4.3	2.1	1.9	1.9
13	4.8	13.0	6.1	13.0	6.1	8.2	9.8	7.1	4.3	2.1	2.1	1.9
14	4.8	9.0	5.7	9.0	6.1	6.4	9.4	7.8	4.0	2.1	1.9	2.4
15	4.8	5.4	5.7	8.6	6.1	6.4	8.6	7.8	4.0	2.2	1.9	2.8
16	4.8	5.7	5.7	8.2	7.1	7.1	8.2	7.8	3.2	2.1	1.9	2.6
17	4.8	6.1	5.7	7.8	9.0	7.8	7.8	9.0	3.5	2.1	1.9	2.4
18	5.4	6.1	5.7	7.1	8.2	7.4	7.8	7.8	3.3	2.1	1.6	2.8
19	6.7	7.4	5.7	6.4	8.6	6.7	7.4	7.4	3.3	2.1	1.9	2.6
20	5.7	7.4	5.7	5.1	8.2	6.7	7.4	7.1	3.3	2.1	4.3	2.6
21	5.4	6.1	7.1	6.7	8.6	8.2	7.4	6.7	3.3	2.1	3.0	2.6
22	5.4	5.4	5.7	6.4	8.6	8.2	7.8	7.1	3.3	2.1	2.8	2.4
23	5.1	4.8	5.7	6.4	7.4	7.4	7.8	7.4	3.0	1.6	2.4	2.4
24	5.1	5.4	5.7	9.0	6.7	7.8	7.8	7.8	3.3	1.7	2.4	2.2
25	5.1	5.1	6.4	8.2	6.7	11.0	8.6	7.1	2.8	1.9	2.2	2.4
26	4.8	5.1	7.1	7.4	7.1	15.0	14.0	8.2	3.3	2.1	2.2	2.6
27	4.5	4.5	7.4	14.0	8.6	11.0	12.0	7.4	3.0	2.2	2.2	2.8
28	4.5	4.5	7.1	13.0	11.0	11.0	10.0	6.7	2.8	2.1	2.2	2.4
29	4.5	4.5	6.7	9.0	---	11.0	9.4	6.4	2.4	2.2	2.2	2.4
30	4.5	4.8	6.7	9.4	---	13.0	9.0	6.1	2.6	2.2	2.2	2.4
31	4.5	---	6.7	7.4	---	14.0	---	5.4	---	2.1	2.2	---
Mean	5.1	5.7	6.1	9.8	7.4	9.3	10.8	8.2	4.0	2.1	2.2	2.3
Runoff acre-feet	316	341	374	600	408	571	645	503	237	132	132	136

Total for period - 4,395 acre-feet

TABLE B-41

DAILY MEAN DISCHARGE OF EDSON-FOULKE YREKA DITCH AT SHASTA RIVER

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	Sept.
1	17.8	35	33	21	4.1	2.4
2	19.4	32	33	21	4.1	2.5
3	21	33	33	21	4.0	2.7
4	23	29	33	19.4	3.1	2.7
5	24	30	33	19.4	3.3	2.7
6	24	30	33	19.7	3.3	2.7
7	22	31	31	18.1	3.1	2.7
8	20	32	29	15.2	3.0	2.5
9	20	33	29	13.2	3.0	2.4
10	20	33	28	11.9	3.0	2.4
11	19.4	28	29	10.3	3.0	2.2
12	19.4	31	34	10.3	3.0	2.2
13	19.1	35	36	10.9	2.8	2.2
14	17.8	36	36	10.9	2.5	2.2
15	17.8	34	35	9.9	2.5	2.7
16	17.2	33	31	9.4	2.4	2.7
17	18.8	32	30	9.1	2.4	3.1
18	23	30	31	8.4	2.4	17.5
19	22	28	33	8.0	3.3	7.3
20	22	26	35	7.5	3.6	5.4
21	28	28	34	5.2	3.4	4.9
22	32	31	34	5.2	3.1	4.7
23	34	32	33	5.2	3.0	NO
24	32	33	32	5.2	2.8	RECORD
25	34	34	31	5.2	2.7	
26	32	35	30	5.2	2.5	
27	28	35	27	5.2	2.5	
28	27	33	25	4.9	2.4	
29	31	32	24	5.2	2.4	
30	33	31	23	4.7	2.4	
31	---	32	---	4.1	2.4	
Mean	24	32	31	10.6	3.0	3.8
Runoff acre-feet	1,423	1,954	1,857	653	181	164

Total for period - 6,232 acre-feet

TABLE B-42

DAILY MEAN DISCHARGE OF EDSON-FOULKE YREKA DITCH NORTH OF PARKS CREEK

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	41	52	41	20	4.9	3.5
2	49	48	43	19.5	4.9	3.3
3	56	47	44	19.5	4.9	3.3
4	60	44	44	18.6	4.7	3.3
5	61	45	46	17.3	4.3	3.3
6	57	47	46	17.0	4.3	3.3
7	48	49	43	15.8	4.3	3.3
8	46	50	42	13.6	4.3	3.3
9	42	51	40	12.2	4.3	3.3
10	42	50	40	11.8	4.2	3.3
11	40	50	41	11.3	3.8	3.2
12	37	54	40	11.3	3.8	2.9
13	35	57	39	11.3	3.7	2.9
14	34	58	38	11.0	3.5	3.2
15	37	54	36	10.5	3.5	3.3
16	39	50	38	9.8	3.5	3.5
17	40	49	36	9.4	3.5	3.5
18	38	45	35	9.2	3.3	14.1
19	34	41	35	8.6	4.2	7.5
20	33	39	35	8.2	4.3	6.3
21	41	39	35	6.5	4.5	5.5
22	49	45	34	6.0	4.3	5.3
23	47	45	34	6.0	4.0	N
24	45	44	33	6.1	3.7	
25	45	44	33	6.3	3.7	O
26	50	45	31	6.1	3.5	R
27	48	43	28	6.1	3.5	E
28	47	41	26	6.1	3.3	C
29	51	40	23	6.0	3.5	O
30	55	39	21	5.7	3.5	R
31	---	40	---	5.3	3.5	D
Mean	45	47	37	10.7	4.0	5.2
Runoff acre-feet	2,667	2,861	2,178	658	244	226

Total for period - 8,834 acre-feet

TABLE B-43

DAILY MEAN STORAGE IN DWINNELL RESERVOIR

October 1, 1958 to September 30, 1959

In second-feet

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28,400	27,100	27,100	27,500	36,900	40,600	40,600	34,800	30,200	24,400	17,000	11,300
2	28,300	27,000	27,100	27,500	36,900	40,600	40,600	34,600	30,100	24,200	16,700	11,100
3	28,300	27,000	27,100	27,500	37,000	40,700	40,500	34,400	29,900	24,000	16,500	11,000
4	28,300	27,000	27,100	27,600	37,000	40,800	40,400	34,200	29,700	23,700	16,300	10,900
5	28,200	27,000	27,100	27,600	37,000	40,900	40,400	34,100	29,600	23,500	16,000	10,800
6	28,100	27,000	27,100	27,700	37,100	40,900	40,300	34,000	29,500	23,200	15,800	10,600
7	28,100	27,000	27,100	28,000	37,200	41,000	40,200	33,800	29,400	22,900	15,600	10,500
8	28,000	27,000	27,100	29,000	37,200	41,100	40,100	33,700	29,200	22,700	15,300	10,400
9	28,000	27,000	27,100	30,200	37,200	41,100	39,900	33,600	29,100	22,400	15,100	10,300
10	27,900	27,000	27,100	31,000	37,300	41,100	39,700	33,500	29,000	22,200	14,900	10,200
11	27,900	27,000	27,100	31,500	37,300	41,100	39,600	33,400	28,900	21,900	14,700	10,000
12	27,800	27,000	27,100	33,100	37,400	41,200	39,400	33,300	28,700	21,600	14,400	9,900
13	27,800	27,000	27,100	34,200	37,500	41,200	39,200	33,100	28,500	21,400	14,200	9,700
14	27,700	27,000	27,100	34,500	37,500	41,200	38,900	33,000	28,300	21,200	14,000	9,600
15	27,600	27,100	27,100	34,700	37,700	41,300	38,700	32,900	28,100	20,900	13,700	9,500
16	27,600	27,100	27,100	34,900	38,800	41,300	38,400	32,800	27,900	20,800	13,500	9,400
17	27,500	27,100	27,100	35,100	39,900	41,300	38,200	32,700	27,600	20,700	13,300	9,300
18	27,500	27,100	27,100	35,300	40,700	41,300	37,900	32,500	27,400	20,500	13,100	9,200
19	27,500	27,100	27,100	35,400	41,000	41,200	37,700	32,300	27,200	20,300	12,900	9,100
20	27,400	27,100	27,100	35,500	41,000	41,200	37,400	32,200	26,900	20,000	12,800	9,000
21	27,400	27,100	27,100	35,500	41,100	41,100	37,200	32,100	26,700	19,800	12,600	9,000
22	27,400	27,100	27,100	35,500	41,100	41,100	36,900	31,800	26,500	19,500	12,500	9,000
23	27,300	27,100	27,100	35,600	40,900	41,100	36,600	31,600	26,200	19,200	12,400	8,900
24	27,300	27,100	27,100	35,800	40,700	40,900	36,300	31,500	26,000	19,000	12,300	8,900
25	27,200	27,100	27,100	36,000	40,700	40,900	36,100	31,300	25,700	18,700	12,200	8,800
26	27,200	27,100	27,200	36,100	40,700	40,800	35,800	31,100	25,500	18,500	12,100	8,800
27	27,200	27,100	27,400	36,300	40,700	40,800	35,600	31,000	25,200	18,200	11,900	8,700
28	27,100	27,100	27,400	36,400	40,700	40,700	35,400	30,800	25,000	18,000	11,800	8,700
29	27,100	27,100	27,400	36,500		40,600	35,200	30,600	24,800	17,700	11,700	8,600
30	27,100	27,100	27,500	36,700		40,600	35,000	30,500	24,600	17,500	11,500	8,600
31	27,100		27,500	36,800		40,600		30,300		17,200	11,400	

TABLE B-44

DAILY MEAN RELEASES FROM DWINNELL RESERVOIR

March 1, to September 30, 1959

In second-feet

Day	March	April	May	June	July	August	Sept.
1		15.1	83	29	57	75	37
2		24	82	33	54	75	36
3	N	35	77	41	56	74	35
4		40	64	41	66	74	35
5	O	47	54	42	74	74	35
6		49	44	42	79	74	34
7	R	51	39	36	78	74	34
8		53	35	10.3	78	73	34
9	E	56	31	9.4	78	73	36
10		65	31	13.0	76	73	36
	C						
11		66	36	30	75	74	35
12	O	68	43	43	75	73	34
13		73	43	44	76	71	34
14	R	75	45	47	75	71	33
15		75	55	59	69	70	32
	D						
16		76	56	61	28	70	31
17		77	60	66	18	64	26
18	7.0	80	63	71	48	59	23
19	24	82	64	71	71	58	19.8
20	24	85	64	72	79	45	19.8
21	24	84	64	73	79	32	19.8
22	24	84	64	72	78	24	20.3
23	24	84	64	72	77	18.8	20.3
24	23	84	63	72	77	23	19.8
25	23	84	60	73	76	27	19.8
26	22	84	48	71	76	31	19.8
27	19.2	84	49	70	75	34	19.8
28	17.3	84	48	66	75	36	21
29	19.2	84	43	56	75	38	22
30	9.8	84	41	53	75	37	22
31	10.5		34		75	37	
Mean	19.3	68	53	51	69	56	28
Release acre-feet	537	4,023	3,261	3,047	4,253	3,429	1,673

Total for period 20,223 acre-feet

TABLE B-45

DAILY MEAN DISCHARGE OF BIG SPRINGS IRRIGATION DISTRICT PUMP

April 1, to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	NO	20	18.0	5.0		22
2	RECORD		26.	27		18.0
3			26	27		19.0
4		NO	26	27		20
5		FLOW	26	27		17.0
6	19.0		26	27		
7	19.0		25	27	NO	
8	20		25	27	RECORD	
9	20		25	28		NO
10	20		25	28		
						FLOW
11	19.0	20	14.0	27		
12	15.0	21	6.0	29		5.0
13	18.0	23	20	30		30
14		23	26	30		30
15		22	26	30		30
16	NO RECORD	23	27	30		30
17		25	27	0		24
18		25	27	10.0		18.0
19		24	27	29		18.0
20	18.0	25		29		18.0
21	18.0	25		29		18.0
22	20	25		29		18.0
23	17.0	15.0		30		
24	21	7.0		30	15	
25	18.0			30	30	
26	14.0			28	31	
27	19.0	NO	NO	7.0	30	NO
28	23	FLOW	RECORD		29	RECORD
29	23				30	
30	23				30	
31	---				30	
Mean	19	10.4	24	25	28	15.0
Runoff acre-feet	721	640	887	1,340	446	663

Total for period - 4,697 acre-feet

TABLE B-46

DAILY MEAN DISCHARGE OF SHASTA RIVER WATER ASSOCIATION PUMPING PLANT

March 1 to October 30, 1959

In second-feet

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	N	0	40	40	40	40	40	0
2		0	40	40	40	40	40	0
3	0	17.9	40	40	40	40	40	0
4		40	40	40	40	40	40	0
5	F	39	38	40	40	40	40	0
6	L	40	40	40	40	40	40	0
7		40	40	40	40	40	40	30
8	0	40	40	40	40	40	40	40
9		40	40	40	40	40	40	40
10	W	40	40	40	40	22	40	40
11		40	40	40	40	35	40	25
12	19.2	40	35	40	40	40	40	20
13	40	40	33	40	40	40	40	23
14	40	40	40	40	29	40	40	22
15	40	40	40	40	35	40	40	19.0
16	40	40	40	40	40	40	40	10.7
17	40	40	40	40	39	40	40	
18	40	40	35	28	40	40	40	
19	40	40	38	40	40	40	40	N
20	40	40	40	40	40	40	40	
								0
21	40	40	40	40	40	40	40	
22	40	40	38	38	40	40	40	
23	40	40	40	40	40	40	40	F
24	40	40	40	40	40	40	40	
25	40	40	40	40	40	40	33	L
26	40	40	40	40	40	40	33	0
27	40	40	40	40	40	40	33	
28	40	40	40	40	40	40	33	W
29	40	40	40	40	40	40	33	
30	25	40	40	40	40	40	33	
31	0	---	40	---	40	40	---	
Mean	23	36	39	40	39	39	39	8.7
Runoff acre-feet	1,433	2,172	2,410	2,348	2,422	2,410	2,105	535

Total for period - 15,835 acre-feet

TABLE B-47

DAILY MEAN DISCHARGE OF GRENADA IRRIGATION DISTRICT
PUMPING PLANT

April 1, to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	37	30	33	22	32
2		36	22	33	23	30
3	O	25	22	30	21	23
4		24	10.0	7.0	22	23
5		23	0	1.0	22	23
	R					
6		24	0	1.0	22	20
7	E	24	0	0	22	1.0
8		24	0	2.0	27	0
9	C	29	0	1.0	32	0
10		37	1.0	21	32	0
	O					
11		36	0	22	32	2.0
12	R	36	0	33	32	2.0
13		37	0	33	25	0
14	D	31	1.0	33	21	0
15		22	22	33	21	0
16		22	22	33	21	0
17		22	22	33	21	0
18		30	27	33	21	0
19		38	34	33	18.0	2.0
20		38	34	33	28	0
21	37	38	34	33	32	0
22	35	38	34	33	0	0
23	37	36	34	30	1.0	0
24	37	35	34	24	32	0
25	37	34	34	30	32	0
26	37	34	34	25	32	N
27	37	34	33	19	32	O
28	37	34	33	21	32	R
29	37	34	33	22	32	E
30	37	34	34	22	32	C
31	---	34	---	22	32	O
						R
						D
Mean	37	32	19	24	26	6.3
Runoff acre-feet	728	1,940	1,156	1,443	1,532	313

Total for period - 7,112 acre-feet

TABLE B-48

DAILY MEAN DISCHARGE OF SOUTH FORK PIT RIVER NEAR LIKELY

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	69	90	54	19	97	33
2	75	94	80	32	111	32
3	81	78	103	38	143	32
4	89	58	99	39	143	32
5	102	62	104	38	143	33
6	98	81	106	38	138	32
7	87	63	104	41	155	32
8	87	57	103	39	166	32
9	89	73	99	35	166	32
10	87	60	97	35	164	32
11	89	60	91	35	164	32
12	90	58	90	35	164	32
13	90	73	89	35	162	34
14	85	107	89	35	144	35
15	82	124	89	36	82	35
16	82	117	89	37	81	35
17	81	128	87	36	81	35
18	78	139	86	40	81	35
19	77	109	83	43	81	35
20	77	73	83	41	83	35
21	77	55	98	40	82	37
22	75	55	107	39	81	36
23	73	63	106	38	81	35
24	74	74	104	58	79	35
25	77	61	103	82	59	37
26	79	74	109	83	35	39
27	82	78	91	79	35	41
28	82	78	52	79	35	40
29	78	71	49	86	35	43
30	74	64	32	98	35	44
31	---	58	---	97	34	---
Mean	82	78	89	49	101	35
Runoff acre-feet	4,890	4,830	5,310	2,990	6,230	2,090

Total for period - 26,340 acre-feet

TABLE B-49

DAILY MEAN DISCHARGE OF SOUTH FORK PIT RIVER NEAR JESS VALLEY

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	37	56	46	17.0	10.0	5.3
2	45	57	40	15.0	10.0	5.3
3	49	52	40	13.0	8.6	5.3
4	58	49	36	13.0	8.6	5.3
5	76	56	40	13.0	8.6	5.6
6	69	75	44	13.0	7.7	5.6
7	56	56	44	14.0	6.8	5.3
8	53	49	42	14.0	6.8	5.3
9	54	67	37	12.0	5.6	5.3
10	53	54	34	10.0	4.2	5.3
11	54	47	27	10.0	4.6	5.3
12	57	40	29	10.0	4.9	5.6
13	54	40	25	10.0	4.9	6.4
14	46	51	25	10.0	4.9	7.2
15	44	56	26	11.0	4.9	7.7
16	43	48	26	12.0	5.3	8.1
17	42	61	25	11.0	4.9	8.6
18	40	72	25	13.0	4.9	8.6
19	38	61	25	17.0	5.3	8.1
20	38	51	23	16.0	9.5	8.6
21	36	47	22	15.0	9.0	10.0
22	36	45	20	14.0	7.2	10.0
23	35	57	19.0	14.0	6.8	9.5
24	34	71	18.0	13.0	6.0	9.5
25	35	54	17.0	13.0	6.0	10.0
26	40	72	21	12.0	5.6	12.0
27	42	79	39	11.0	5.6	13.0
28	43	77	23	11.0	5.6	12.0
29	40	68	20	12.0	5.6	14.0
30	35	60	18.0	12.0	5.6	15.0
31	---	53	---	10.0	5.3	---
Mean	46	58	29	13	6.4	8.1
Runoff acre-feet	2,741	3,533	1,738	776	395	482

Total for period - 9,665 acre-feet

TABLE B-50

DAILY MEAN RELEASES FROM WEST VALLEY RESERVOIR

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	36	36	5.0	11.0	90	28
2	36	36	62	11.0	90	27
3	36	36	62	25	148	27
4	36	7.0	62	25	148	27
5	36	7.0	62	25	148	27
6	36	7.0	62	25	148	27
7	36	7.0	62	25	148	27
8	36	7.0	62	25	148	27
9	36	7.0	62	25	148	27
10	36	7.0	62	25	148	27
11	36	15.0	62	25	148	27
12	36	15.0	62	25	148	27
13	36	33	62	25	148	27
14	36	66	62	25	148	27
15	36	66	62	25	75	27
16	36	66	62	25	75	27
17	36	66	62	25	75	26
18	36	66	62	25	75	26
19	36	48	62	25	75	26
20	36	22	62	25	75	26
21	36	5.0	62	25	75	26
22	36	5.0	87	25	75	26
23	36	5.0	87	25	75	26
24	36	5.0	87	66	75	26
25	36	5.0	87	66	53	28
26	36	5.0	87	66	29	28
27	36	5.0	52	66	29	28
28	36	5.0	29	66	29	28
29	36	5.0	29	66	29	28
30	36	5.0	11.0	90	29	28
31	---	5.0	---	90	29	---
Mean	36	22	60	36	95	27
Release acre-feet	2,140	1,340	3,570	2,220	5,810	1,600

Total for period - 16,680 acre-feet

TABLE B-51

DAILY MEAN DISCHARGE OF PINE CREEK NEAR ALTURAS BELOW POWERHOUSE

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	11.0	24	18.0	16.0	7.7	7.7
2	13.0	23	18.0	16.0	7.7	7.7
3	14.0	22	18.0	16.0	7.7	7.7
4	15.0	21	18.0	15.0	7.7	7.7
5	15.0	22	20.0	15.0	7.0	7.7
6	15.0	21	23	15.0	6.4	7.7
7	15.0	21	23	14.0	5.9	7.7
8	15.0	20	24	14.0	5.9	7.7
9	15.0	23	26	13.0	5.9	7.0
10	15.0	21	27	12.0	5.9	7.0
11	16.0	19.0	27	12.0	5.3	7.0
12	17.0	19.0	25	12.0	5.3	7.0
13	16.0	19.0	25	12.0	5.3	7.0
14	15.0	20	25	13.0	5.3	7.7
15	15.0	20	24	13.0	5.3	8.9
16	15.0	19.0	24	12.0	5.3	8.3
17	15.0	22	23	12.0	5.3	7.7
18	15.0	23	23	11.0	5.3	8.3
19	15.0	23	23	12.0	5.3	8.3
20	17.0	22	23	12.0	12.0	8.3
21	18.0	22	22	12.0	10.0	7.7
22	18.0	22	21	11.0	8.9	7.0
23	20	22	20	12.0	8.3	7.7
24	20	21	19.0	12.0	8.3	7.7
25	20	21	20	10.0	8.3	7.7
26	20	25	22	10.0	8.9	8.3
27	19.0	23	22	9.6	7.7	7.7
28	20	22	19.0	9.6	7.7	7.7
29	20	20	18.0	8.6	7.7	7.7
30	21	20	18.0	8.3	7.0	7.7
31	---	19.0	---	8.3	7.0	
Mean	16.5	21	22	12.2	7.0	7.7
Runoff acre-feet	982	1,311	1,305	751	431	458

Total for period - 5,238 acre-feet

TABLE B-52

DAILY MEAN DISCHARGE OF PIT RIVER BELOW ALTURAS

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	77	43	80	39	75	31
2	73	46	78	39	92	94
3	60	73	65	39	86	98
4	26	96	55	39	79	100
5	40	77	49	39	79	101
6	92	75	56	39	79	102
7	86	91	56	39	80	104
8	64	81	55	39	80	104
9	59	65	55	39	82	104
10	47	53	55	39	80	95
11	36	44	55	39	81	36
12	37	24	55	40	82	28
13	54	21	56	40	87	34
14	41	30	56	40	91	35
15	32	43	56	40	94	25
16	22	36	64	40	95	25
17	17	71	63	40	94	32
18	14	71	52	40	94	45
19	24	66	45	38	89	45
20	32	87	38	46	60	74
21	99	85	36	76	45	76
22	107	79	36	90	32	71
23	98	99	39	94	35	70
24	89	154	40	88	36	56
25	81	149	40	79	33	46
26	73	87	39	72	32	42
27	64	127	39	79	32	41
28	64	107	38	84	34	43
29	51	98	38	84	35	44
30	50	92	39	79	32	48
31	---	68	---	76	32	---
Mean	57	75	51	55	66	62
Runoff acre-feet	3,390	4,637	3,031	3,360	4,080	3,667

Total for period - 22,165 acre-feet

TABLE B-53

DAILY MEAN RELEASES FROM BIG SAGE RESERVOIR

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	28	28	95	35	125
2		28	28	95	35	125
3	O	28	28	95	80	125
4		28	28	95	80	125
5		28	28	95	88	125
6	R	28	28	35	88	125
7		28	28	35	88	125
8	E	28	28	35	88	125
9		28	28	35	88	125
10	L	28	28	35	88	79
11	E	28	28	35	88	79
12		28	28	35	88	79
13	A	28	28	35	88	79
14		28	28	35	88	79
15	S	28	28	35	88	89
16	E	28	28	35	88	79
17		28	28	35	88	79
18		28	28	35	88	79
19		28	28	35	32	79
20	98	28	28	35	32	79
21	98	28	28	35	32	79
22	98	28	95	35	32	79
23	98	28	95	35	32	79
24	98	28	95	35	32	79
25	98	28	95	35	32	79
26	98	28	95	35	32	79
27	98	28	95	35	32	79
28	98	28	95	35	32	79
29	98	28	95	35	32	79
30	28	28	95	35	32	79
31	---	28	---	35	32	---
Mean	34	28	48	45	61	93
Release acre-feet	2,016	1,736	2,886	2,772	3,756	5,568

Total for period - 18,734 acre-feet

TABLE B-54

DAILY MEAN DISCHARGE OF PAYNE DITCH ABOVE NORTH FORK FITZHUGH CREEK

June 1 to August 31, 1959

In second-feet

Day	June	July	August	September
1	2.1	2.9	2.0	N
2	2.4	2.8	2.0	
3	2.6	2.8	2.0	O
4	2.8	2.7	2.0	
5	2.9	2.7	2.0	
				R
6	3.0	2.6	2.0	
7	2.9	2.6	2.0	E
8	2.6	2.6	2.0	
9	2.6	2.5	2.0	C
10	2.6	2.4	2.0	
				O
11	2.5	2.4	2.0	
12	2.5	2.4	2.0	R
13	2.5	2.4	2.0	
14	2.5	2.4	2.0	D
15	2.4	2.1	1.9	
16	2.8	2.1	1.8	
17	3.1	3.2	1.9	
18	3.0	2.2	1.9	
19	3.0	2.2	2.0	
20	2.9	2.3	2.0	
21	2.9	2.3	2.0	
22	2.9	2.3	1.9	
23	3.2	2.3	1.9	
24	3.2	2.3	2.0	
25	3.3	2.3	2.1	
26	3.3	2.2	2.2	
27	3.3	2.2	2.2	
28	3.2	2.2	2.2	
29	3.1	2.1	2.2	
30	3.0	2.1	2.2	
31		2.0	2.2	
Mean	2.8	2.4	2.0	---
Runoff acre-feet	170	147	125	---

Total for period - 442 acre-feet

TABLE B-55

DAILY MEAN DISCHARGE OF BOWMAN DITCH

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1	N	2.9	3.3	2.6	2,3
2		3.0	3.3	2.6	2.3
3	O	3.2	3.4	2.6	2.3
4		3.3	3.4	2.6	2.3
5		3.5	3.3	2.6	2.3
	R				
6	E	3.5	3.3	2.6	2.3
7		3.4	3.3	2.6	2.2
8	C	3.2	3.3	2.6	2.2
9	O	3.1	3.1	2.5	2.2
10	R	3.1	2.9	2.5	N
	D				
11	0.9	3.0	2.8	2.4	O
12	0.9	3.0	2.8	2.5	
13	0.9	3.1	2.4	2.5	R
14	0.9	3.0	2.4	2.4	
15	0.9	3.0	3.2	2.4	E
16	0.9	3.3	3.6	2.3	C
17	0.9	3.5	3.3	2.4	
18	0.9	3.4	2.9	2.4	O
19	0.8	3.4	2.8	2.6	
20	0.8	3.3	3.1	2.9	R
21	0.8	3.3	3.0	2.6	D
22	0.8	3.3	2.7	2.6	
23	0.9	3.1	3.0	2.5	
24	0.8	3.1	3.0	2.5	
25	1.0	3.1	2.8	2.5	
26	2.7	3.8	2.8	2.3	
27	3.6	3.7	2.7	2.4	
28	3.7	3.5	2.7	2.4	
29	3.4	3.4	2.7	2.4	
30	3.2	3.3	2.6	2.4	
31	3.2		2.6	2.3	
Mean	1.6	3.3	2.9	2.5	2.3
Runoff - acre-feet	66	196	182	155	41

Total for period - 640 acre-feet

TABLE B-56

DAILY MEAN DISCHARGE OF NORTH FORK FITZHUGH CREEK BELOW BOWMAN DITCH

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1	N	1.9	1.4	0.9	0.7
2	O	2.0	1.4	0.8	0.7
3		2.1	1.4	0.9	0.7
4	R	2.2	1.4	0.8	0.7
5	E	2.4	1.4	0.8	0.7
6	C	2.5	1.3	0.8	0.7
7	O	2.3	1.3	0.8	0.6
8	R	2.1	1.2	0.8	0.6
9	D	1.8	1.2	0.8	0.6
10		1.8	1.1	0.8	0.7
11	2.5	1.7	1.1	0.8	0.8
12	2.5	1.6	1.1	0.8	0.8
13	2.6	1.7	1.0	0.8	0.8
14	2.6	1.7	1.3	0.8	0.8
15	2.5	1.5	1.2	0.8	0.8
16	2.3	1.7	1.0	0.8	0.6
17	2.4	1.8	0.9	0.8	0.6
18	2.4	1.8	0.9	0.8	0.6
19	2.3	1.8	1.0	0.8	0.6
20	2.2	1.9	1.1	1.0	N
21	2.1	1.9	1.1	0.8	O
22	2.2	1.9	1.0	0.8	
23	2.2	2.0	0.7	0.7	R
24	2.1	2.1	0.6	0.7	
25	2.1	2.3	0.5	0.7	E
26	2.1	2.4	0.5	0.7	C
27	2.1	1.8	0.5	0.8	
28	2.1	1.7	0.5	0.8	O
29	2.0	1.6	0.5	0.7	
30	2.0	1.5	0.8	0.7	R
31	2.0	---	0.9	0.7	D
Mean	2.3	1.9	1.0	0.8	0.7
Runoff acre-feet	95	115	63	49	25

Total for period - 347 acre-feet

TABLE B-57

DAILY MEAN DISCHARGE OF BIDWELL CREEK

January 1 to September 30, 1959

In second-feet

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	5.6	11.0	15	26	27	7.6	3.6	2.8
2	5.1	5.3	14.0	24	23	28	7.2	3.6	2.8
3	5.1	6.5	14.0	33	22	30	6.9	3.4	2.8
4	5.1	6.2	13.0	40	19	31	6.5	3.2	2.8
5	4.8	5.6	13.0	43	21	33	6.2	3.2	2.8
6	6.2	5.9	12.0	42	19	34	6.2	3.2	2.8
7	6.2	6.2	12.0	33	19	32	5.9	3.2	2.8
8	6.2	6.2	12.0	28	19	28	5.6	3.4	2.8
9	8.7	6.5	12.0	26	21	26	5.6	3.4	2.8
10	9.1	6.6	11.0	25	21	24	5.3	3.4	2.8
11	9.1	7.2	10.0	26	22	22	5.1	3.4	2.8
12	20.0	7.6	12.0	28	25	19	5.1	3.2	2.8
13	15.0	8.7	14.0	28	30	19	4.8	3.2	2.8
14	11.0	8.3	12.0	26	33	18	5.1	3.2	3.4
15	9.5	7.2	11.0	24	30	18	4.8	3.2	4.5
16	8.7	6.9	11.0	22	28	16	4.5	3.2	3.8
17	7.9	6.9	13.0	20	31	15	4.3	3.2	3.6
18	7.6	6.5	14.0	19	28	14	4.5	3.2	4.8
19	6.5	6.2	13.0	17	25	13	4.3	3.4	5.3
20	6.2	5.9	11.0	16	24	12	4.3	3.2	4.3
21	8.3	6.5	12.0	16	23	11	4.0	3.4	3.8
22	8.3	6.5	11.0	18	22	10	4.0	3.2	3.8
23	7.2	6.2	11.0	21	21	9.9	4.0	3.2	3.6
24	7.2	6.4	10.0	233	21	9.9	4.0	3.2	3.4
25	6.5	6.2	9.4	27	22	10	3.8	3.2	3.4
26	6.5	6.2	9.9	28	28	13	3.8	3.0	3.8
27	8.3	7.2	8.7	24	27	10	3.4	3.0	3.6
28	7.9	8.7	9.1	22	27	9.1	3.6	2.8	3.6
29	6.5	---	9.5	21	26	8.3	3.6	2.8	3.6
30	6.9	---	9.9	21	27	8.3	3.6	2.8	3.6
31	6.2	---	9.9	22	27		3.6	2.8	
Mean	7.9	6.7	11.5	25	24	19	4.9	3.2	3.4
Runoff acre-feet	484	369	705	1,497	1,498	1,108	300	197	203

Total for period - 6,361 acre-feet

TABLE B-58

DAILY MEAN DISCHARGE OF MILL CREEK

March 1 to September 30, 1959

In second-feet

Day	March	April	May	June	July	August	September
1		6.5	13.4	8.3	2.7	1.5	1.5
2		7.4	23.0	7.1	3.2	1.6	1.5
3		12.0	19.0	7.1	3.2	1.6	1.5
4	N	14.0	11.0	7.4	3.2	1.6	1.5
5	O	17.0	9.8	7.4	3.2	1.7	1.5
6		18.0	9.8	7.7	3.2	1.7	1.5
7	R	17.0	9.8	7.7	3.0	1.6	1.5
8		14.0	9.8	7.7	3.0	1.6	1.6
9	E	13.0	9.8	7.7	3.0	1.6	2.3
10		13.0	9.8	7.4	3.0	1.6	1.8
	C						
11		12.0	9.8	7.1	3.0	1.6	2.0
12	O	12.0	9.8	6.8	3.0	1.6	2.0
13		12.0	9.8	6.3	3.0	2.0	2.1
14	R	13.0	9.8	5.9	2.7	2.0	2.1
15		11.0	9.8	5.5	2.7	2.0	2.1
	D						
16		9.8	9.8	5.1	2.7	1.8	2.1
17		9.8	9.8	4.7	2.3	1.6	2.1
18		9.5	9.8	4.4	2.3	1.6	2.1
19		8.6	9.5	3.7	2.3	1.8	2.1
20		8.0	8.7	3.7	2.3	2.7	2.1
21		7.7	8.3	4.7	2.4	4.2	2.0
22		7.7	8.0	4.8	2.2	3.4	N
23	5.3	8.0	8.0	4.8	2.1	2.7	
24	5.9	8.0	8.0	4.8	2.0	1.5	O
25	7.1	8.6	7.7	4.7	1.8	1.5	
							R
26	6.8	6.0	11.0	4.4	1.7	1.5	E
27	6.8	9.0	21.0	4.4	1.6	1.5	C
28	6.5	9.8	17.0	4.4	1.7	1.5	O
29	6.5	9.8	13.0	4.4	1.7	1.5	R
30	6.5	9.5	13.0	4.4	1.7	1.5	
31	6.5	9.5	9.2	---	1.6	1.5	D
Mean	6.4	10.7	11.2	5.8	2.5	1.8	1.8
Runoff acre-feet	115	656	685	345	153	113	77

Total for period - 2,144 acre-feet

TABLE B-59

DAILY MEAN DISCHARGE OF SOLDIER CREEK

March 1 to September 30, 1959

In second-feet

Day	March	April	May	June	July	August	September
1		24.0	18.0	4.3	2.1	1.3	1.4
2	N	31.0	15.0	4.3	2.1	1.3	1.4
3		32.0	15.0	4.1	2.0	1.3	1.3
4	O	32.0	13.0	4.1	2.0	1.3	1.3
5		31.0	13.0	3.7	1.9	1.3	1.3
6	R	25.0	15.0	3.7	1.9	1.4	1.3
7		19.0	12.0	3.5	1.9	1.4	1.3
8	E	18.0	11.0	3.5	1.9	1.5	1.3
9		16.0	11.0	3.2	1.8	1.5	1.3
10	C	18.0	9.2	3.2	1.8	1.5	1.3
11	O	18.0	9.2	2.8	1.8	1.5	1.3
12		17.0	9.2	2.7	1.8	1.5	1.3
13	R	15.0	9.7	2.5	1.8	1.5	1.4
14		13.0	8.8	2.5	1.8	1.5	1.4
15	D	11.0	6.9	2.4	1.8	1.5	1.4
16		8.8	5.7	2.4	1.8	1.5	1.4
17		8.4	7.6	2.4	1.7	1.5	1.3
18		8.4	6.0	2.4	1.7	1.5	1.3
19		7.9	5.4	2.4	1.7	1.5	1.3
20		7.6	5.2	2.4	1.7	1.5	1.3
21	8.4	8.4	5.0	2.4	1.6	1.5	1.3
22	6.9	11.0	5.2	2.3	1.6	1.5	N
23	6.2	12.0	5.2	2.3	1.6	1.5	
24	5.4	12.0	5.0	2.3	1.6	1.5	O
25	6.6	12.0	4.7	2.4	1.6	1.5	R
26	6.9	12.0	9.2	3.2	1.5	1.4	E
27	7.9	12.0	9.7	3.4	1.5	1.4	C
28	7.2	12.0	6.9	2.4	1.4	1.4	O
29	7.6	12.0	6.0	2.3	1.4	1.4	R
30	7.2	12.0	5.2	2.2	1.3	1.4	D
31	9.2		4.7		1.3	1.4	
Mean	7.2	15.9	8.8	2.9	1.7	1.4	1.3
Runoff acre-feet	157	943	540	174	106	88	55

Total for period - 2,063 acre-feet

TABLE B-60

DAILY MEAN DISCHARGE OF PINE CREEK

March 1 to May 30, 1959

In second-feet

Day	March	April	May	June	July	August	September
1	N	4.3		N	N	N	N
2		8.9	2.2				
3	0	10.0	2.4	0	0	0	0
4		11.0	1.9				
5		8.9	2.5				
	R						
6		6.1	3.1	R	R	R	R
7	E	4.4	2.4				
8		3.6	1.9	E	E	E	E
9	C	3.7	1.7				
10		3.1	1.3	C	C	C	C
	O						
11		3.3	1.0	O	O	O	O
12	R	3.3	N				
13		2.8		R	R	R	R
14	D	2.5	O				
15		2.2		D	D	D	D
16		1.4	R				
17		1.5					
18		1.5	E				
19		1.5					
20	2.4	1.5	C				
21	2.4	1.5	O				
22	1.8	1.5					
23	1.6	1.5	R				
24	1.6	1.5					
25	1.5	1.5	D				
26	1.9	1.5					
27	1.9	1.3					
28	2.2						
29	1.9	NO					
30	3.0	RECORD					
31	2.7						
Mean	2.1	3.5	2.0				
Runoff acre-feet	49	189	40				

Total for period - 278 acre-feet

TABLE B-61

DAILY MEAN DISCHARGE OF CEDAR CREEK

January 1 to September 30, 1959

In second-feet

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	September
1	1.0	1.7	3.4	5.9	5.4	2.2	0.7	0	0
2	0.8	1.7	3.7	7.0	4.9	2.2	0.7	0	0
3	0.8	2.0	5.4	7.0	5.4	2.0	0.6	0	0
4	0.8	1.7	5.4	7.0	5.4	2.0	0.7	0	0
5	0.8	1.7	4.9	7.0	6.4	2.2	0.8	0	0
6	0.9	1.7	4.9	5.9	6.4	2.2	0.8	0	0
7	0.9	1.7	4.5	5.4	5.9	2.0	0.7	0	0
8	0.9	1.5	4.5	6.4	5.4	1.7	0.6	0	0
9	1.0	1.5	4.1	5.9	5.4	1.7	0.7	0	0
10	1.4	1.5	3.7	5.4	4.9	1.7	0.5	0	0
11	1.4	1.5	3.7	5.4	4.5	1.5	0.6	0	0
12	6.2	1.5	4.5	5.4	4.1	1.2	1.0	0	0
13	3.4	1.4	5.9	4.9	4.1	1.2	1.0	0	0
14	2.2	1.4	4.9	4.5	4.1	1.0	1.0	0.1	0.1
15	2.0	1.4	4.5	4.1	3.7	1.0	0.8	0	0.2
16	1.7	1.5	5.4	4.1	3.4	1.0	0.3	0	0.2
17	1.5	1.5	4.9	3.7	3.4	0.9	0.2	0	0.1
18	1.5	1.5	4.5	3.7	3.4	0.8	0.1	0	0.2
19	1.4	1.5	4.1	3.4	2.8	0.8	0.1	0	0.3
20	1.2	1.7	4.1	3.4	2.5	0.8	0.2	0.3	0.3
21	1.4	1.7	4.1	3.4	2.5	0.7	0.1	0.3	0.3
22	1.4	1.7	4.1	3.4	2.8	0.7	0.1	0.2	0.3
23	1.4	1.7	4.1	3.7	2.5	0.7	0.2	0.2	0.2
24	1.4	1.7	3.7	4.1	2.5	0.8	0.2	0.1	0.2
25	1.4	1.7	3.7	4.5	2.8	1.0	0.1	0.1	0.2
26	1.4	1.7	3.7	4.9	4.5	1.0	0.1	0.1	0.2
27	1.7	2.0	3.7	4.5	4.1	1.0	0	0	0.3
28	2.0	2.5	4.1	4.1	3.4	0.9	0.1	0	0.3
29	1.7	---	4.1	3.7	3.1	0.8	0.1	0	0.3
30	2.0	---	4.1	3.4	2.5	0.8	0.1	0	0.3
30	2.0	---	4.1	---	2.5	---	0.1	0	---
Mean	1.6	1.7	4.3	4.8	4.0	1.3	0.4	0	0.1
Runoff acre-feet	99	92	267	288	247	76	26	3	8

Total for period - 1,106 acre-feet

TABLE B-62

DAILY MEAN DISCHARGE OF NORTH DEEP CREEK

March 1 to September 30, 1959

In second-feet

Day	March	April	May	June	July	August	September
1	N	4.6	3.2	1.7	0.7	0.6	0.4
2		5.2	1.8	1.7	0.7	0.6	0.4
3	O	5.7	1.8	1.7	0.7	0.5	0.4
4		5.7	1.8	1.7	0.7	0.5	0.4
5		5.7	1.7	1.5	0.7	0.5	0.4
	R						
6		5.7	1.7	1.5	0.6	0.5	0.4
7	E	4.6	1.7	1.4	0.6	0.5	0.4
8		4.2	2.0	1.3	0.6	0.5	0.4
9	C	3.8	2.1	1.3	0.6	0.4	0.4
10		4.2	2.0	1.2	0.6	0.4	0.4
	O						
11		4.6	2.0	1.2	0.6	0.4	0.4
12	R	4.2	2.0	1.0	0.6	0.4	0.4
13		2.9	1.8	1.0	0.5	0.4	0.4
14	D	2.7	1.8	1.0	0.5	0.4	0.4
15		2.5	1.8	1.0	0.5	0.4	0.3
16		2.3	1.7	1.0	0.4	0.4	0.3
17		2.3	1.7	1.0	0.4	0.4	0.3
18		2.3	1.7	1.0	0.4	0.4	0.3
19		2.3	1.5	1.0	0.4	0.4	0.3
20		2.3	1.5	0.9	0.4	0.4	0.3
21		2.3	1.3	0.9	0.4	0.4	0.3
22		2.3	1.2	0.9	0.4	0.4	N
23		2.3	1.2	0.8	0.5	0.4	O
24	2.5	2.3	1.2	0.8	0.7	0.5	
25	2.5	2.5	1.2	0.8	0.7	0.4	R
							E
26	2.5	2.5	2.9	0.8	0.6	0.4	C
27	2.5	2.7	2.0	0.8	0.6	0.4	O
28	2.5	2.9	1.7	0.8	0.6	0.4	R
29	2.5	2.9	1.7	0.8	0.6	0.4	D
30	4.6	3.2	1.5	0.8	0.6	0.4	
31	4.2	---	1.7	---	0.6	0.4	
Mean	3.0	3.4	1.8	1.1	0.6	0.4	0.4
Runoff acre-feet	47	205	109	66	35	27	15.2

Total for period - 504 acre-feet

TABLE B-63

DAILY MEAN DISCHARGE OF SOUTH DEEP CREEK

March 1 to September 30, 1959

In second-feet

Day	March	April	May	June	July	August	September
1	N	7.0	4.5	2.6	0.4	0.6	0.5
2	O	11.0	4.5	2.4	0.3	0.6	0.5
3		12.0	4.5	2.3	0.3	0.5	0.5
4	R	13.0	4.5	2.3	0.3	0.5	0.5
5	E	14.0	4.5	2.3	0.3	0.5	0.5
	C						
6	O	13.0	4.5	2.3	0.3	0.5	0.5
7	R	10.0	4.5	2.1	0.3	0.5	0.5
8	D	7.6	4.5	1.9	0.3	0.4	0.4
9		7.0	4.5	1.8	0.3	0.4	0.4
10		6.6	4.5	1.7	0.3	0.4	0.4
11		6.6	4.5	1.7	0.3	0.4	0.4
12		7.0	4.2	1.6	0.3	0.4	0.4
13		7.3	4.2	1.4	0.6	0.4	0.4
14		7.0	4.2	1.4	0.4	0.4	0.4
15		6.3	3.7	1.3	0.3	0.4	0.4
16		5.9	3.4	1.1	0.3	0.4	0.4
17		5.6	3.7	1.0	0.2	0.4	0.4
18		4.5	3.4	1.0	0.3	0.4	0.4
19		4.5	3.2	0.9	0.4	0.4	0.5
20		4.2	3.0	0.7	0.3	0.4	0.6
21		4.2	3.0	0.6	0.4	0.4	0.6
22		4.2	2.8	0.4	0.5	0.4	
23		4.2	2.8	0.3	0.6	0.4	N
24	3.9	4.2	2.6	0.4	0.6	0.5	O
25	3.7	4.2	4.5	0.5	0.6	0.5	
							R
26	3.9	5.0	6.6	1.1	0.6	0.5	E
27	3.9	4.5	4.5	1.1	0.6	0.5	C
28	3.9	4.2	4.2	0.7	0.6	0.5	O
29	3.9	3.9	3.7	0.4	0.6	0.5	R
30	4.2	3.7	3.0	0.6	0.6	0.5	D
31	5.0	---	2.8	---	0.6	0.5	
Mean	4.0	6.7	4.0	1.3	0.4	0.4	0.4
Runoff acre-feet	64	401	244	79	25	28	19

Total for period - 860 acre-feet

TABLE B-64

DAILY MEAN DISCHARGE OF OWL CREEK

March 1 to September 30, 1959

In second-feet

Day	March	April	May	June	July	August	September
1		11.0	29	22	8.0	1.8	1.3
2	N	24	24	23	7.0	1.8	1.3
3		23	20	23	6.5	1.8	1.3
4	O	25	17.0	23	6.0	2.0	1.3
5		25	14.0	23	5.7	2.0	1.3
6	R	22	13.0	23	5.2	2.0	1.3
7		19.0	14.0	23	5.2	1.8	1.3
8	E	16.8	14.0	23	4.9	1.8	1.5
9		16.0	16.0	23	4.6	1.7	1.7
10	C	17.0	16.0	22	4.3	1.7	1.7
11	O	19.9	18.0	21	4.0	1.7	1.6
12		21	15.0	21	3.7	1.7	2.4
13	R	21	16.0	20	3.3	1.7	1.7
14		21	18.0	19	3.7	1.7	1.7
15	D	19.0	16.0	17.0	3.5	1.7	1.6
16		18.0	15.0	16.0	3.1	1.7	1.4
17		18.0	16.0	16.0	2.9	1.4	1.4
18		17.0	15.0	16.0	2.6	1.4	1.4
19		16.0	14.0	15.0	2.6	1.4	1.4
20		16.0	12.0	14.0	2.6	1.8	1.4
21		17.0	12.0	14.0	2.6	1.7	1.4
22		21	12.0	14.0	2.4	1.7	1.4
23		22	17.0	13.0	2.6	1.5	N
24	4.5	23	12.0	12.0	2.6	1.5	
25	4.5	22	21	12.0	2.0	1.5	O
26	4.5	21	49	14.0	2.0	1.3	R
27	4.5	19.0	26	13.0	1.8	1.3	E
28	4.0	20	23	10.0	2.1	1.3	C
29	4.0	21	21	9.0	2.2	1.3	O
30	5.4	21	21	8.5	2.1	1.3	R
31	7.8	---	20	---	2.0	1.3	D
Mean	4.9	20	18	17	3.7	1.6	1.5
Runoff acre-feet	78	1,174	1,093	1,034	225	100	65

Total for period - 3,769 acre-feet

TABLE B-65

DAILY MEAN DISCHARGE OF RADER CREEK

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	4.5	6.5	14.0	4.5	1.6	1.1
2	4.5	6.0	14.0	4.5	1.6	1.1
3	4.5	6.0	14.0	4.2	1.6	1.1
4	3.5	6.0	15.0	4.2	1.6	1.0
5	3.5	5.4	16.0	4.0	1.4	1.0
6	3.5	5.4	17.0	4.0	1.4	1.0
7	4.5	5.4	18.0	3.8	1.3	1.0
8	5.4	5.4	16.0	3.8	1.3	1.0
9	6.0	6.0	15.0	3.6	1.3	1.0
10	6.0	7.0	15.0	3.3	1.3	1.0
11	6.0	8.0	15.0	3.3	1.3	1.0
12	6.0	9.0	15.0	2.8	1.3	1.0
13	6.0	10.0	14.0	2.8	1.3	1.0
14	6.0	12.0	14.0	2.7	1.3	1.0
15	6.0	12.0	14.0	2.7	1.3	1.1
16	6.0	12.0	14.0	2.7	1.3	1.1
17	6.0	12.0	14.0	2.7	1.3	1.1
18	6.0	12.0	12.0	2.5	1.3	1.1
19	6.0	13.0	11.0	2.5	1.3	1.1
20	6.0	13.0	10.0	2.3	1.3	1.1
21	6.0	13.0	9.5	2.1	1.3	1.1
22	5.4	13.0	8.0	1.9	1.3	
23	5.4	13.0	7.2	1.9	1.3	N
24	5.4	13.0	7.5	1.9	1.3	O
25	5.4	13.0	7.2	1.9	1.1	
26	5.4	13.0	6.5	1.9	1.1	R
27	5.4	13.0	6.0	1.8	1.1	E
28	5.4	13.0	6.0	1.8	1.1	C
29	5.4	13.0	5.5	1.8	1.1	O
30	6.5	14.0	4.5	1.8	1.1	R
31	---	14.0	---	1.4	1.1	D
Mean	5.4	10.2	11.8	2.8	1.3	1.0
Runoff acre-feet	320	628	703	172	82	44

Total for period - 1,949 acre-feet

TABLE B-66

DAILY MEAN DISCHARGE OF EAGLE CREEK

January 1 to September 30, 1959

In second-feet

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.1	2.3	2.4	4.2	8.2	12	4.7	1.4	0.9
2	3.0	2.3	2.6	5.6	7.0	15	4.5	1.4	0.9
3	5.8	2.6	2.6	6.6	6.8	17	4.4	1.4	0.8
4	12.0	2.3	2.6	7.0	6.4	18	4.0	1.3	0.8
5	12.0	2.1	2.6	2.2	6.4	2.	3.8	1.3	0.8
6	4.7	2.1	2.6	6.6	6.2	23	3.6	1.3	0.8
7	2.0	2.2	2.6	5.8	6.2	21	3.6	1.3	0.8
8	1.9	2.8	2.6	5.4	6.6	18	3.3	1.2	0.8
9	2.2	4.8	2.6	5.4	7.0	18	3.0	1.2	0.8
10	2.1	4.5	2.6	5.6	7.2	15	2.8	1.2	0.8
11	2.2	2.5	2.7	6.2	8.4	15	2.7	1.2	0.8
12	3.8	2.5	2.8	6.8	11.0	17	2.7	1.2	0.8
13	2.6	2.5	3.0	6.8	15.0	17	2.6	1.2	0.8
14	2.5	2.3	2.8	6.6	16.0	16	2.7	1.2	0.9
15	2.3	1.5	2.8	6.2	14.0	14	2.5	1.2	0.9
16	2.2	1.2	3.0	6.0	13.0	13	2.4	1.1	0.9
17	2.2	1.1	3.0	5.6	12.0	11	2.3	1.1	0.8
18	2.2	1.5	3.0	5.4	11.0	12	2.2	1.0	1.0
19	2.2	1.9	2.8	5.2	9.2	12	2.2	1.1	0.9
20	3.0	1.9	2.7	5.4	8.7	12	2.0	1.2	1.0
21	5.0	2.0	2.8	5.8	8.4	12	1.9	1.1	0.9
22	3.0	2.0	2.7	6.6	7.9	11	1.8	1.0	0.9
23	2.1	2.0	2.7	7.7	7.9	9.8	1.9	1.0	0.8
24	2.4	2.0	2.7	8.4	7.9	8.7	1.8	0.9	0.9
25	2.4	1.9	2.7	8.2	8.7	8.7	1.8	0.9	0.9
26	2.4	2.0	2.6	7.5	9.2	8.4	1.6	0.9	1.2
27	2.5	2.0	2.6	6.4	8.9	7.5	1.5	0.9	1.0
28	2.4	2.2	2.6	6.4	8.9	6.2	1.5	0.9	1.0
29	3.0	---	2.7	6.6	8.7	5.8	1.5	0.9	1.0
30	3.2	---	2.8	7.7	8.9	5.2	1.5	0.9	1.0
31	2.5	---	3.0	---	10.0	---	1.4	0.9	---
Mean	3.4	2.3	2.7	6.4	9.1	13.0	2.6	1.1	0.9
Runoff acre-feet	206	125	167	379	559	794	160	69	53

Total for period - 2,512 acre-feet

TABLE B-67

DAILY MEAN DISCHARGE OF EMERSON CREEK

March 1 to September 30, 1959

In second-feet

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		7.1	6.8	6.5	3.8	2.7	2.4
2	N	7.5	6.6	6.2	3.4	2.7	2.3
3		8.0	6.5	6.1	3.4	2.7	2.4
4	O	8.0	6.1	6.0	3.4	2.7	2.4
5		8.0	6.0	6.0	3.4	2.7	2.4
6		7.8	6.1	6.0	3.4	2.7	2.4
7		7.0	6.1	5.8	3.4	2.7	2.5
8	R	7.0	6.1	5.8	3.4	2.7	2.5
9		6.8	7.1	5.8	3.2	2.7	2.5
10	E	6.6	7.0	5.7	3.1	2.7	2.5
11	C	6.8	7.0	5.7	3.0	2.7	2.5
12		7.1	7.0	5.4	3.0	2.7	2.5
13	O	7.1	7.0	5.2	2.9	2.7	2.5
14		7.1	7.1	5.0	2.7	2.7	2.7
15	R	7.0	7.1	5.0	3.1	2.7	2.7
16	D	6.2	7.1	4.5	2.7	2.7	2.7
17		6.1	7.1	4.1	2.7	2.5	2.7
18		6.1	7.1	4.1	2.7	2.5	2.7
19		6.1	7.0	4.1	2.7	2.5	2.7
20		6.1	6.8	4.1	2.7	2.5	2.7
21		6.5	6.6	4.0	2.7	2.5	2.7
22		6.2	6.6	4.0	2.7	3.3	N
23		6.5	6.6	4.0	2.7	2.5	
24		6.5	6.6	4.0	2.7	2.5	O
25		6.5	6.5	4.1	2.7	2.5	
26	5.3	6.5	6.5	5.2	2.7	2.5	R E C O R D
27	5.5	6.6	6.5	5.4	2.7	2.5	
28	5.8	6.6	6.5	5.0	2.7	2.5	
29	6.1	6.6	6.5	4.3	2.7	2.5	
30	6.5	6.6	6.6	4.1	2.7	2.4	
31	6.8	---	6.6	---	2.7	2.4	
Mean	6.0	6.8	6.7	5.0	3.0	2.6	2.5
Runoff acre-feet	71	405	409	299	182	161	106

Total for period - 1,633 acre-feet

TABLE B-68

DAILY MEAN DISCHARGE OF SUSAN RIVER AT SUSANVILLE

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	118	108	27	95	3.4	3.3
2	136	82	23	89	2.8	3.6
3	149	75	24	80	2.6	3.9
4	163	70	22	63	2.7	3.4
5	165	66	21	27	2.6	3.4
6	154	65	19.0	15.0	2.6	3.4
7	133	62	17.0	11.0	2.7	3.6
8	117	61	17.0	9.7	3.1	3.9
9	108	156	17.0	8.6	3.1	4.3
10	102	163	18.0	7.6	3.1	4.4
11	102	167	16.0	6.2	3.1	4.3
12	102	167	15.0	5.1	3.1	4.4
13	98	165	17.0	4.4	3.1	4.5
14	95	167	14.0	4.5	3.3	4.9
15	89	163	13.0	4.3	3.4	6.2
16	82	159	13.0	4.3	3.5	6.4
17	77	158	12.0	4.2	3.5	6.4
18	71	154	12.0	4.2	3.6	12
19	69	149	11.0	4.3	3.6	9.7
20	66	145	9.3	4.3	4.4	7.8
21	65	142	8.4	4.2	4.4	7.5
22	66	149	7.6	4.3	4.3	7.3
23	67	159	49	4.4	4.2	7.2
24	68	161	89	4.5	4.5	7.0
25	72	145	100	4.4	4.4	6.8
26	95	149	103	4.4	3.4	6.8
27	75	156	106	4.2	3.4	7.2
28	70	142	104	4.2	3.1	7.5
29	68	140	103	4.3	3.3	6.8
30	90	72	98	4.0	3.5	7.2
31	---	32	---	3.9	3.3	---
Mean	97.7	127	36.8	16.1	3.4	5.8
Runoff acre-feet	5,803	7,819	2,188	987	208	347

Total for period - 17,352 acre-feet

TABLE B-69

DAILY MEAN DISCHARGE OF GOLD RUN CREEK ABOVE DIVERSIONS

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	8.5	15.0	5.8	1.5	0.1	0.1
2	10.0	13.0	5.8	1.4	0.1	0.1
3	12.0	12.0	5.8	1.3	0.1	0.1
4	14.0	11.0	5.6	1.2	0.1	0.1
5	16.0	11.0	5.3	1.0	0.1	0.1
6	15.0	11.0	5.3	0.9	0.1	0.1
7	12.0	12.0	4.8	0.9	0.1	0.1
8	11.0	13.0	4.6	0.8	0.1	0.1
9	11.0	14.0	4.2	0.7	0.1	0.1
10	11.0	13.0	4.4	0.6	0.1	0.1
11	12.0	13.0	4.6	0.6	0.1	0.1
12	12.0	14.0	4.4	0.5	0.1	0.1
13	12.0	15.0	4.4	0.4	0.1	0.1
14	13.0	14.0	4.0	0.4	0.1	0.2
15	11.0	12.0	3.8	0.4	0.1	0.5
16	11.0	11.0	3.6	0.4	0.1	0.4
17	10.0	10.0	3.4	0.3	0.2	0.3
18	9.9	9.5	3.3	0.2	0.1	1.6
19	9.9	8.8	2.9	0.2	0.2	0.7
20	10.0	8.5	2.8	0.2	0.2	0.5
21	11.0	8.1	2.6	0.2	0.3	0.5
22	12.0	8.1	2.5	0.2	0.2	0.5
23	13.0	8.5	2.3	0.2	0.2	0.5
24	14.0	7.5	2.1	0.2	0.2	0.5
25	15.0	7.2	2.2	0.2	0.3	0.4
26	14.0	7.5	2.3	0.2	0.2	0.4
27	12.0	6.9	2.8	0.1	0.1	0.4
28	13.0	6.6	2.3	0.1	0.1	0.4
29	15.0	6.3	2.0	0.1	0.1	0.5
30	16.0	6.1	1.8	0.1	0.1	0.5
31	---	5.8	---	0.1	0.1	---
Mean	12.2	10.3	3.7	0.5	0.1	0.3
Runoff acre-feet	725	632	221	31	8.3	20

Total for period - 1,642 acre-feet

TABLE B-70

DAILY MEAN DISCHARGE OF SUSAN RIVER AT JOHNSTONVILLE BRIDGE

April 1 to June 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	NO	14.0	12.0			
2	RECORD	18.0	18.0			
3		17.0	18.0			
4		18.0	18.0			
5		11.0	18.0			
6		10.0				
7		7.0				
8	58	9.0				
9	36	9.0				
10	10.0	8.0				
11	55	8.0				
12	55	11.0				
13	50	12.0				
14	50	10.0				
15	45	10.0				
16	16.0	8.0				
17	30	9.0				
18	26	9.0				
19	28	9.0				
20	21	9.0				
		9.0				
21	18.0	9.0				
22	16.0	9.0				
23	11.0	9.0				
24	12.0	9.0				
25	14.0	9.0	Removed for Bridge Replacement	Removed for Bridge Replacement	Removed for Bridge Replacement	Removed for Bridge Replacement
26	15.0	10.0				
27	10.0	10.0				
28	10.0	10.0				
29	12.0	10.0				
30	12.0	10.0				
31	---	10.0				
Mean	26	10.4	16.8			
Runoff acre-feet	1,208	636	166			

Total for period = 2,010 acre-feet

TABLE B-71

DAILY MEAN DISCHARGE OF WILLOW CREEK NEAR SUSANVILLE

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	15.0	18.0	22.	14.0	13.0	13.0
2	17.0	18.0	22	14.0	13.0	13.0
3	19.0	19.0	18.0	14.0	13.0	13.0
4	18.0	20	18.0	14.0	13.0	13.0
5	18.0	20	17.0	14.0	13.0	13.0
6	17.0	19.0	16.0	14.0	13.0	13.0
7	16.0	20	16.0	15.0	13.0	13.0
8	16.0	19.0	15.0	15.0	13.0	14.0
9	16.0	18.0	14.0	15.0	14.0	14.0
10	16.0	18.0	14.0	15.0	14.0	14.0
11	17.0	20	14.0	15.0	14.0	14.0
12	17.0	22	14.0	15.0	14.0	14.0
13	16.0	20	14.0	14.0	14.0	14.0
14	15.0	18.0	14.0	14.0	14.0	14.0
15	15.0	18.0	14.0	14.0	14.0	14.0
16	15.0	18.0	14.0	14.0	13.0	14.0
17	16.0	18.0	14.0	14.0	14.0	14.0
18	16.0	17.0	14.0	14.0	14.0	14.0
19	16.0	16.0	14.0	14.0	14.0	15.0
20	17.0	16.0	14.0	14.0	14.0	15.0
21	18.0	16.0	14.0	14.0	13.0	15.0
22	18.0	16.0	14.0	14.0	13.0	15.0
23	18.0	16.0	14.0	14.0	13.0	15.0
24	16.0	18.0	14.0	14.0	13.0	15.0
25	14.0	19.0	14.0	13.0	13.0	15.0
26	16.0	21	14.0	13.0	13.0	16.0
27	17.0	22	14.0	13.0	13.0	16.0
28	17.0	23	14.0	13.0	14.0	18.0
29	18.0	23	14.0	13.0	14.0	20
30	18.0	22	14.0	13.0	14.0	22
31	---	21	---	13.0	13.0	---
Mean	16.6	19.0	15.1	14.0	13.5	14.8
Runoff acre-feet	988	1,170	897	859	827	879

Total for period - 5,620 acre-feet

TABLE B-72

DAILY MEAN DISCHARGE OF WILLOW CREEK
NEAR LITCHFIELD

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1	22	22	22	16.0	15.0	16.0
2	23	23	24	16.0	14.0	16.0
3	27	23	20	16.0	15.0	15.0
4	25	24	20	15.0	15.0	15.0
5	25	24	19.0	15.0	15.0	16.0
6	24	24	18.0	15.0	15.0	16.0
7	22	23	18.0	16.0	15.0	16.0
8	22	23	17.0	16.0	15.0	16.0
9	21	22	16.0	16.0	15.0	16.0
10	21	22	16.0	16.0	15.0	16.0
11	22	22	17.0	16.0	15.0	16.0
12	22	26	16.0	16.0	15.0	16.0
13	21	23	16.0	15.0	15.0	16.0
14	20	21	16.0	15.0	15.0	16.0
15	20	21	16.0	15.0	16.0	16.0
16	20	21	16.0	15.0	15.0	16.0
17	20	20	16.0	15.0	16.0	16.0
18	20	20	16.0	15.0	16.0	17.0
19	21	20	16.0	15.0	17.0	17.0
20	21	19.0	16.0	15.0	16.0	17.0
21	21	19.0	16.0	15.0	16.0	17.0
22	22	19.0	16.0	15.0	16.0	16.0
23	22	20	16.0	16.0	15.0	16.0
24	23	20	16.0	16.0	16.0	16.0
25	18.0	21	16.0	15.0	16.0	16.0
26	20	23	15.0	16.0	16.0	16.0
27	22	23	15.0	16.0	16.0	17.0
28	22	25	15.0	16.0	16.0	18.0
29	22	25	15.0	16.0	16.0	19.0
30	22	24	15.0	16.0	16.0	22
31	---	23	---	15.0	15.0	
Mean	21.8	22.1	16.9	15.5	15.5	16.5
Runoff acre-feet	1,295	1,359	1,004	954	950	980

Total for period - 6,542 acre-feet

TABLE B-73

DAILY MEAN DISCHARGE OF BAXTER CREEK ABOVE DIVERSIONS

April 1 to July 31, 1959

In second-feet

Day	April	May	June	July	August	September
1	N	3.2	3.3	0.5	N	N
2	O	3.2	3.1	0.5	O	O
3		3.2		0.4		
4	R	3.2	3.1	0.4	R	R
5	E	3.1	3.2	0.2	E	E
	C				C	C
6	O	2.9	3.1	N	O	O
7	R	2.9	3.1	O	R	R
8	D	3.2	2.8		D	D
9	4.3	3.2	2.4	R		
10	4.3	3.4	2.2	E		
				C		
11	4.2	3.2	2.0	O		
12	4.0	3.1	2.0	R		
13	4.0	3.2	2.0	D		
14	4.0	3.2	2.0			
15	4.0	3.2	1.8			
16	4.3	3.2	1.6			
17	4.2	3.3	1.6			
18	4.2	3.3	1.4			
19	4.2	3.3	1.3			
20	3.9	3.3	1.2			
21	4.0	4.0	1.2			
22	4.0	3.7	1.2			
23	4.0	3.4	1.0			
24	4.0	3.4	1.0			
25	4.3	3.4	0.9			
26	4.0	3.4	0.9			
27	4.0	3.4	0.9			
28	3.5	4.2	0.6			
29	3.4	3.8	0.6			
30	3.4	3.4	0.5			
31	---	3.3	---			
Mean	4.0	3.3	1.7	0.4		
Runoff acre-feet	175	204	103	4.0		

Total for period - 486 acre-feet

TABLE B-74

WATER RELEASED FROM STORAGE AND AVAILABLE FOR DIVERSION AT SUSANVILLE

May 1 to September 30, 1959

In second-feet

Day	May	June	July	August	September
1	NO	2	90	N	N
2	RELEASES	1	84	O	O
3			75		
4			57	R	R
5			22		
				E	E
6			10		
7			6	L	L
8			5		
9	97	N	3	E	E
10	106	O	3		
				A	A
11	112	R	2		
12	114		1	S	S
13	114	E			
14	118	L		E	E
15	117	E			
16	112	A			
17	113	S			
18	111	E			
19	108				
20	105		N		
			O		
21	103				
22	111		R		
23	123	42	E		
24	126	92	L		
25	111	94	E		
26		97	A		
27	NO	100	S		
28	RELEASES	98	E		
29		97			
30		92			
31					
Mean	61	74	11.5		
Release acre-feet	3,764	1,416	709		

Total for period - 5,889 acre-feet

TABLE B-75

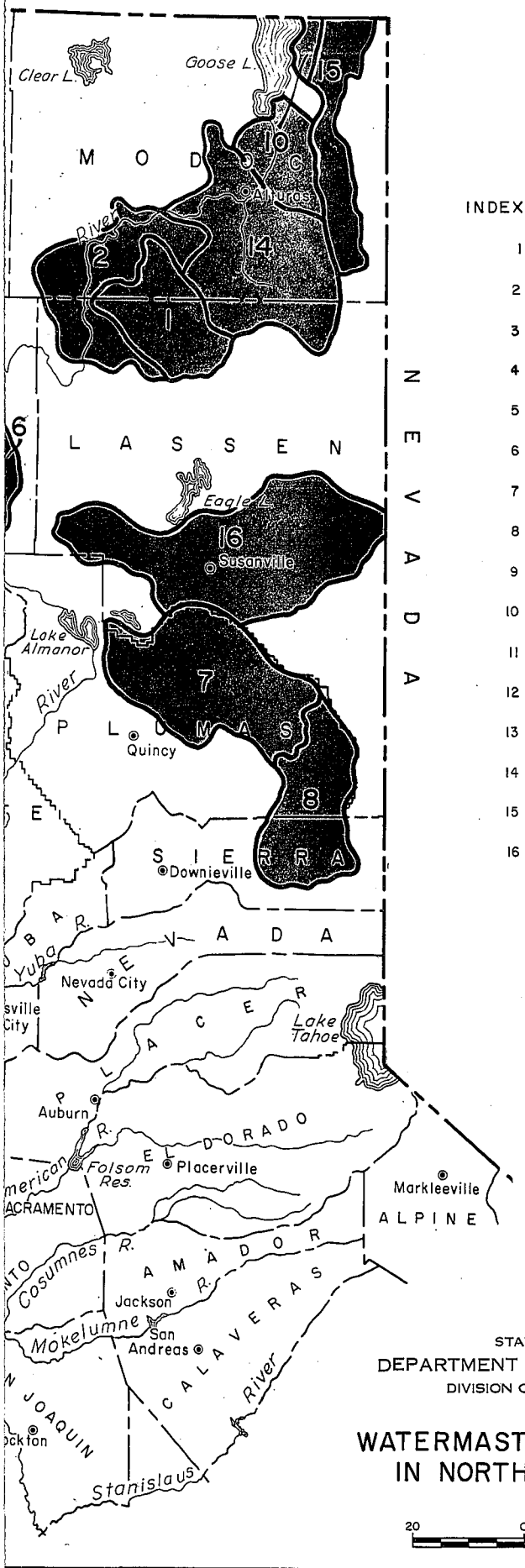
DAILY MEAN DISCHARGE OF JACOBS-NEUHAUS DITCH
AT BARRON MURRER PROPERTY LINE

April 1 to September 30, 1959

In second-feet

Day	April	May	June	July	August	September
1		2.2	1.9	1.7	2.4	2.5
2	2.2	2.2	1.9	1.9	1.9	1.9
3	2.1	1.9	1.9	2.2	1.8	2.4
4	2.2	1.9	1.8	2.2	1.9	3.0
5	2.1	1.9	1.7	2.9	2.0	2.5
6	1.9	1.9	1.8	2.9	2.2	1.9
7	1.9	2.2	1.9	2.8	2.5	1.9
8	1.9	2.3	1.9	2.3	2.4	1.7
9	2.5	2.3	1.9	2.3	1.9	1.9
10	2.4	2.3	1.9	2.4	2.2	1.9
11	2.4	2.5	1.9	1.6	2.4	1.9
12	2.0	2.6	1.9	1.9	1.9	1.9
13	1.3	2.6	5.0	2.2	1.9	1.7
14	2.2	2.6	6.2	2.2	2.0	1.6
15	2.2	2.6	6.2	2.0	1.8	1.9
16	2.2	2.5	2.6	3.3	2.9	2.1
17	2.3	2.4	5.7	3.3	2.3	1.9
18	2.3	2.3	5.4	3.2	2.2	1.6
19	2.4	2.3	5.4	2.8	3.2	1.5
20	2.2	2.2	2.6	2.5	2.2	2.3
21	1.8	2.2	2.2	2.3	1.9	2.4
22	2.3	2.0	1.9	1.9	2.2	2.4
23	2.4	2.2	2.5	1.9	2.2	2.1
24	2.3	2.3	2.6	1.9	2.2	2.2
25	2.2	2.3	2.2	1.9	2.1	2.2
26	2.2	2.3	1.9	2.2	1.7	2.2
27	2.0	2.2	1.9	2.4	1.7	2.2
28	2.0	1.9	1.9	2.4	1.4	2.2
29	2.1	1.9	1.2	2.4	1.4	2.3
30	2.1	1.9	1.7	2.4	1.1	2.3
31	---	1.9	---	2.4	2.9	---
Mean	2.1	2.2	2.7	2.3	2.1	2.1
Runoff acre-feet	123	136	161	144	128	122

Total for period - 793 acre-feet



INDEX TO SERVICE AREAS

1 ASH CREEK
2 BIG VALLEY
3 BURNEY CREEK
4 BUTTE CREEK
5 COW CREEK
6 HAT CREEK
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8 MIDDLE FORK FEATHER RIVER
9 NORTH FORK COTTONWOOD CREEK
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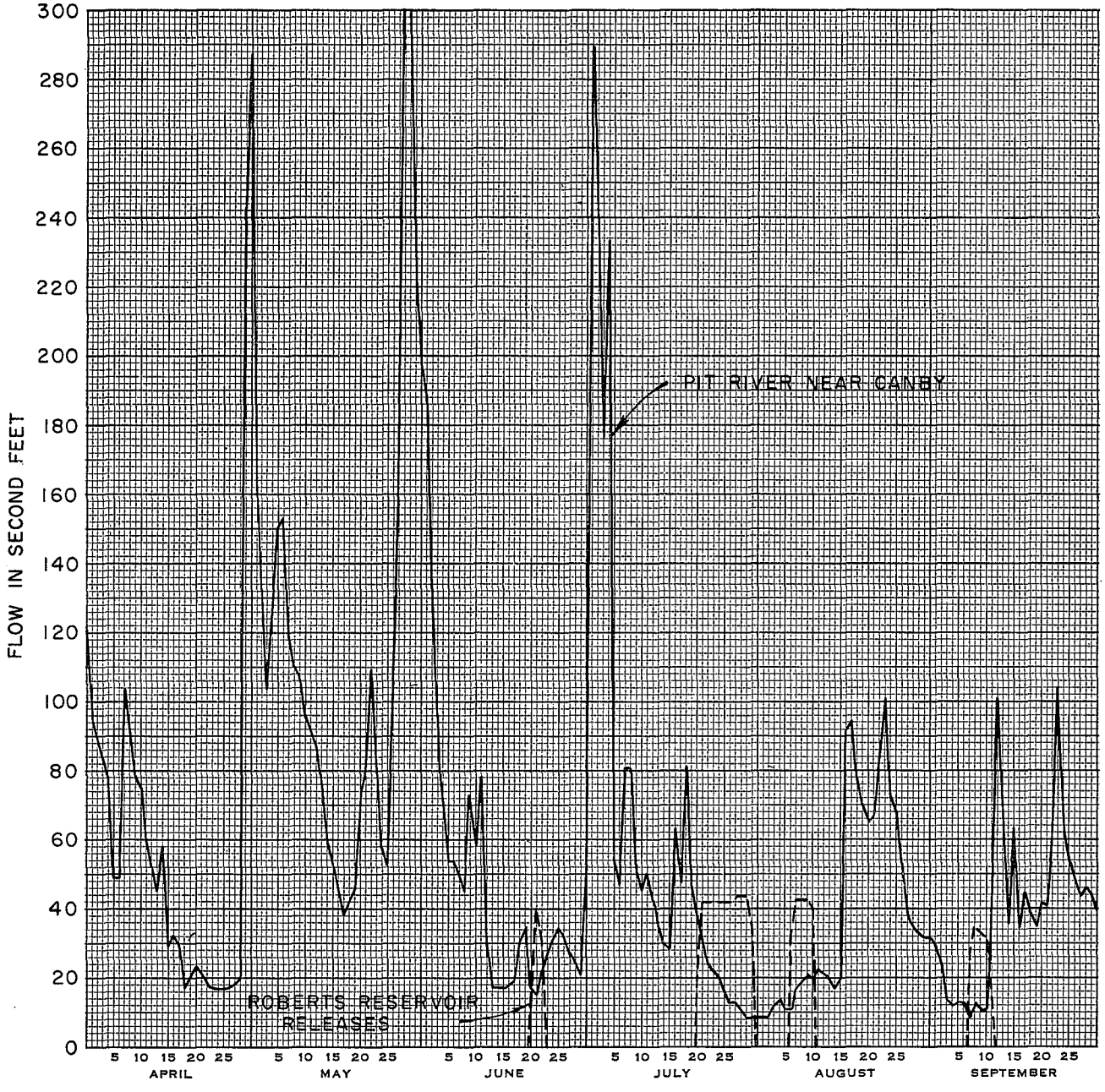
11 SEIAD CREEK
12 SHACKLEFORD CREEK
13 SHASTA RIVER
14 SOUTH FORK PIT RIVER
15 SURPRISE VALLEY
16 SUSAN RIVER

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING

WATERMASTER SERVICE AREAS IN NORTHERN CALIFORNIA

SCALE OF MILES
20 0 20 40

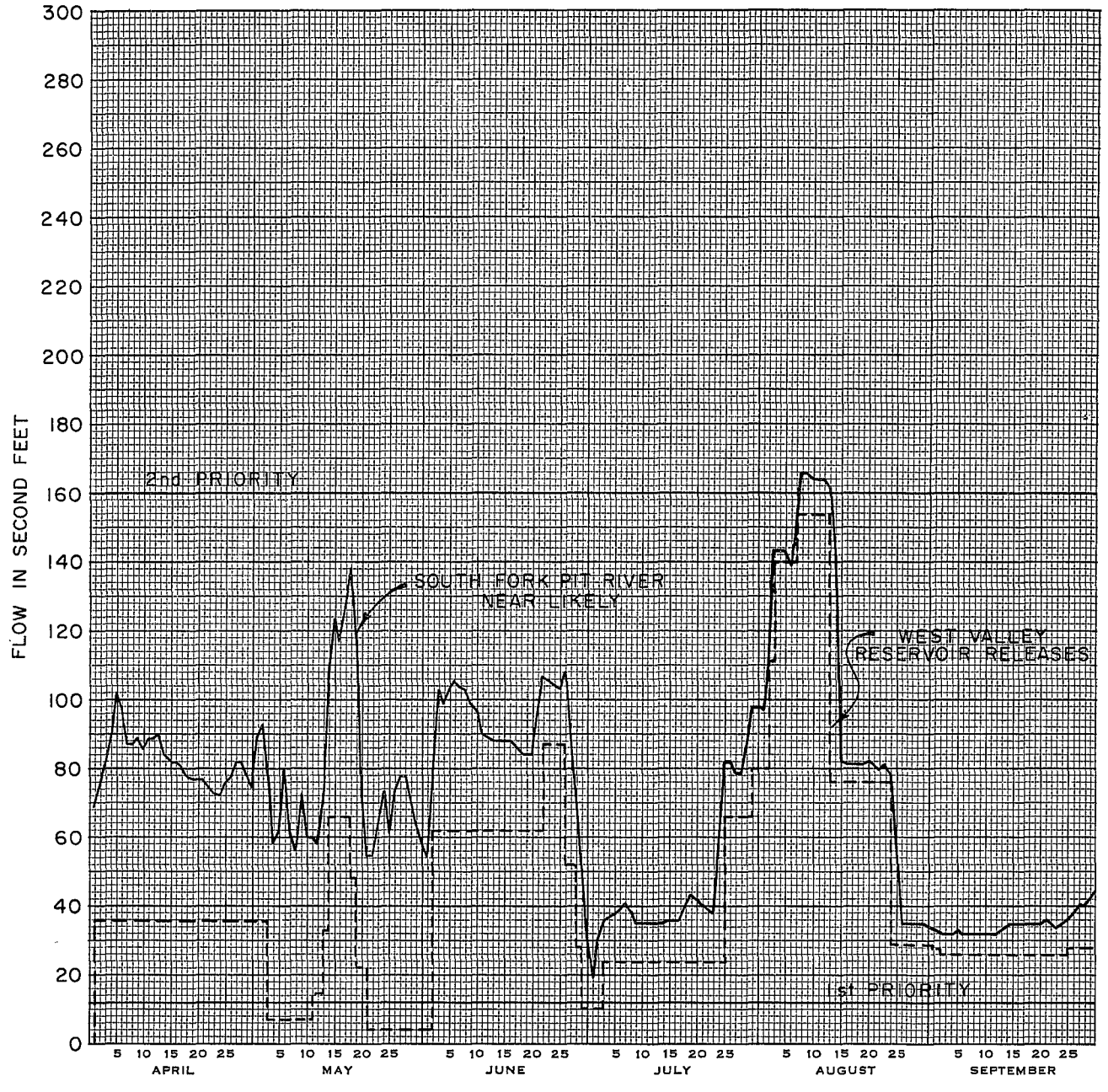
54429
54428



HYDROGRAPHS OF PIT RIVER NEAR CANBY AND ROBERTS RESERVOIR RELEASES 1959 SEASON

DEPARTMENT OF WATER RESOURCES 1961

54429



54429

HYDROGRAPHS OF SOUTH FORK PIT RIVER NEAR LIKELY AND WEST VALLEY RESERVOIR RELEASES 1959 SEASON

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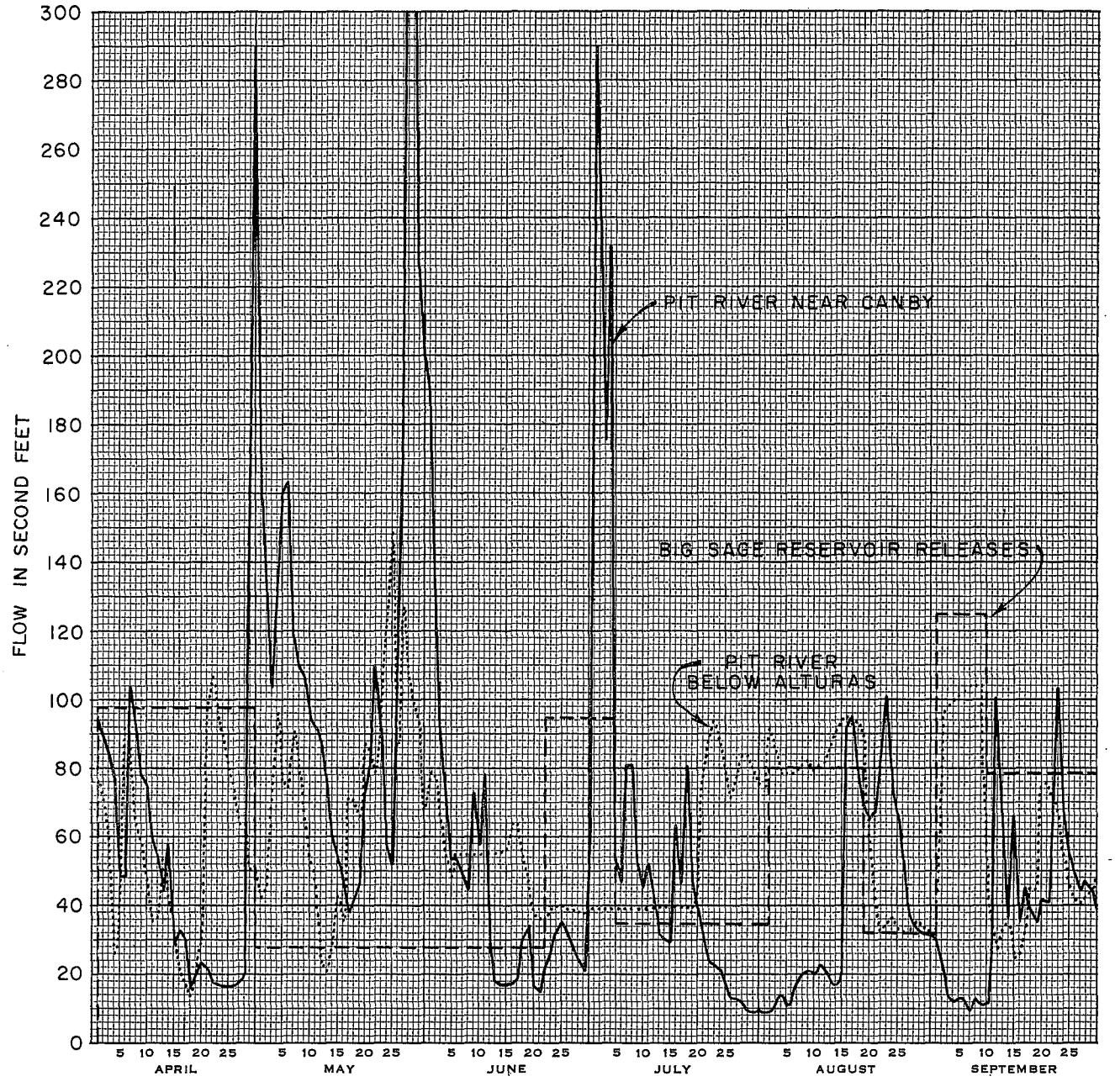
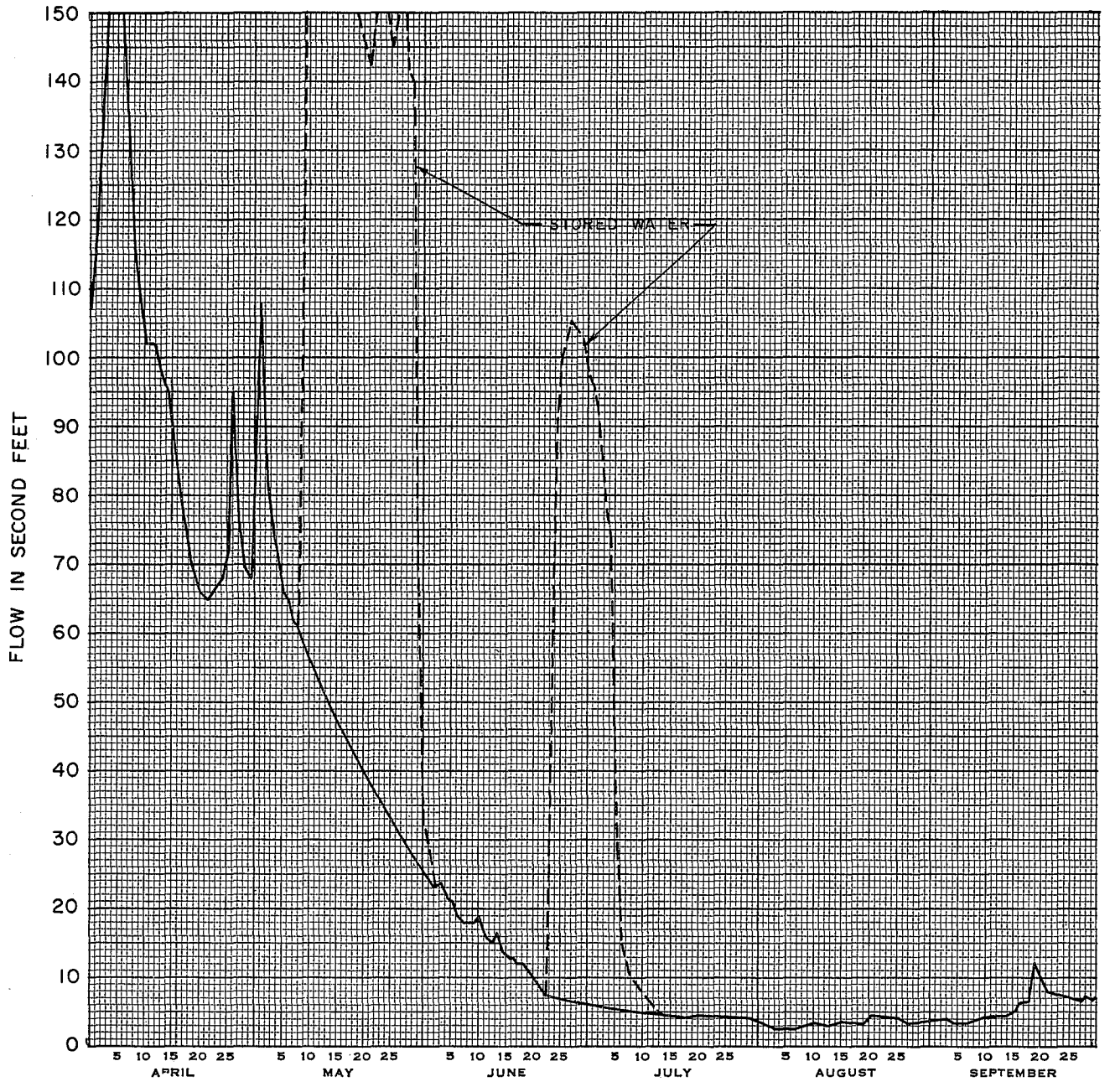


54429

HYDROGRAPHS OF PIT RIVER NEAR CANBY PIT RIVER BELOW ALTURAS AND BIG SAGE RESERVOIR RELEASES 1959 SEASON

DEPARTMENT OF WATER RESOURCES 1961



54429

HYDROGRAPH OF SUSAN RIVER AT SUSANVILLE AND STORED WATER AVAILABLE FOR REDIVERSION AT SUSANVILLE 1959 SEASON

DEPARTMENT OF WATER RESOURCES 1961