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STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

REPORT ON WATERMASTER SERVICE IN NORTHERN CALIFORNIA 1960 SEASON

EDMUND G. BROWN
Governor

WILLIAM E. WARNE
Director of Water Resources

January, 1962

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DIVISION OF RESOURCES PLANNING

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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 if the necessity exists therefore. As of December 30, 1960, eighteen watermaster service areas have been created. Two of these are for ground water basins in Southern California, and sixteen are for the distribution of surface waters of Northern California streams.

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 1960 irrigation season from March 15 to October 1. It is the second report to combine descriptions of water distribution in all of the sixteen 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: 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 1959-60 water year at sixteen 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 1959-60 PRECIPITATION DATA

Station	Mean precipitation	1959-60 precipitation	Percent of mean
	In inches		
Bieber, Lassen County	16.23	12.82	79
Hat Creek Powerhouse No. 1, Shasta County	17.23	13.44	78
Chico, Butte County	24.22	18.16	75
Redding, Shasta County	37.40	30.98	83
Greenville, Plumas County	40.95	27.96	68
Vinton, Plumas County	10.63	8.42	79
Alturas, Modoc County	12.53	9.50	76
Happy Camp, Siskiyou County	45.77	44.27	97
Fort Jones, Siskiyou County	20.86	17.27	83
Yreka, Siskiyou County	17.22	13.75	80
Jess Valley, Modoc County	16.86	13.80	82
Lake City, Modoc County	19.46	17.61	91
Cedarville, Modoc County	12.37	11.87	96
Susanville Airport, Lassen County	15.31	9.11	60
Sierraville, Sierra County	23.81	19.45	82
Lakeview, Oregon	14.25	11.58	81

One of the principal factors 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 1960 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, 1960, 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, 1960, was well below average in all of the areas.

TABLE 2

GENERAL INFORMATION AND 1960 DATA FOR
REPRESENTATIVE SNOW COURSES

Watermaster service area		Elevation in feet	April 1 water content of snow in inches: 50-year computed mean	April 1 water content of snow in inches: 1960	1960 water content in percent of mean
Indian Creek	Mount Deyer	7,400	24.2	15.0	62
North Fork Pit River	Eagle Peak	7,200	16.2	12.1	75
	Blue Lake Ranch	7,300	11.3	7.5	66
	Cedar Pass	7,100	17.0		
Middle Fork Feather River	Independence Lake	8,450	41.1	35.2	86
	Yuba Pass	6,700	31.8	21.8	69
Shasta River	Parks Creek	6,900	34.1	27.3	80
	Sweetwater	5,900	14.2	7.4	52
	North Fork Sacramento	6,800	23.4	17.8	76
	Mount Shasta	7,900	49.4	37.9	77
	Little Shasta	6,200	21.4	14.8	69
South Fork Pit River	Cedar Pass	7,100	17.0	12.7	75
	Eagle Peak	7,200	16.2	12.1	75
	Blue Lake Ranch	7,300	11.3	7.5	66
	Adin Mountain	6,350	14.0	9.6	69
Surprise Valley	Eagle Peak	7,200	16.2	12.1	75
	Blue Lake Ranch	7,300	11.3	7.5	66
	Cedar Pass	7,100	17.0	12.7	75
Susan River	Silver Lake	6,450	27.7	24.9	89
	Fredonyer Pass #1	5,600	9.7	0	0
	Norvel Flat	5,700	16.5	12.7	76

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 runoff for key stations in or near the watermaster service areas.

TABLE 3

SUMMARY OF 1960 RUNOFF DATA

Station	Runoff April 1 to June 30 in thousands of acre-feet: Mean	1960	Runoff April 1 to June 30 in percent of mean
Inflow to Shasta	1,817	1,470	81
South Fork Pit River Near Likely	40	15	38
Middle Fork Feather River Near Clio	1,982	1,202	61
Feather River at Oroville	88	25	28

Runoff in the Shasta Valley area during the months of July and August, in the Cow Creek and Big Valley areas during the months of June, July and August, and in the Surprise Valley and Susan River areas throughout the summer, was very low.

At the end of the irrigation season, Dwinnell Reservoir in Shasta Valley, West Valley Reservoir in South Fork Pit River, and McCoy and Hog Flat Reservoirs on Susan River were empty.

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 1960, 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 1960 season followed the methods and practices initiated in past seasons with little or no modifications. Shortage of both irrigation and stock water occurred on this stream throughout the 1960 season. Irrigation commenced early in April with approximately 70 percent of total allotments available.

Butte Creek water users experienced a severe shortage during the latter part of the irrigation season. By the end of July, there was insufficient water supply to provide stock water to the lower reach of this stream, necessitating pumping from wells by the "lower users" for stockwatering purposes.

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
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

TABLE 4 (cont'd.)

Watermaster service area	Name of stream system	County	Decree number	Date watermaster service area created	Remarks
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	
Surprise Valley	Mill Creek	Modoc	3024	1/10/39	Service area amended 12/31/41
	Soldier Creek	Modoc	2405	1/10/39	
	Pine Creek	Modoc	3391	1/10/39	
	Cedar Creek	Modoc	1206	1/10/39	
		Modoc	2343	1/10/39	

TABLE 4 (cont'd.)

Watermaster service area	Name of stream system	County	Decree number	Date watermaster service area created	Remarks
Surprise Valley (cont'd.)	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 amended 2/16/56
	Baxter Creek	Lassen	8174	2/16/56	
	Parker Creek	Lassen	8175	2/16/56	

On Willow Creek it was necessary to shut off the Parks Ranch early in April. After the middle of April there was insufficient water to satisfy second priority rights. By the first of June and for the remainder of the season water was available for approximately 50 percent of first priority rights.

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 about April 18, when the users in Big Valley installed river dams. From then until June 10, water was available to satisfy all demands, although close supervision was required.

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 about July 20. On the latter date, the shareholders again released water from Roberts Reservoir for irrigation of their lands.

The amounts of water released from Roberts Reservoir to each shareholder in the Big Valley Mutual Water Company are shown in Table 5. Shareholders are entitled to available water in accordance with the number of shares they hold.

TABLE 5

RELEASES OF WATER FROM ROBERTS RESERVOIR - 1960

Name of shareholder	Acre-feet of water	Number of shares
Lester Babcock	225	3
Bob Bartel	75	2
Oral Gerig	175	3
Peter Gerig	150	5
Clarence Hawkins	75	1
C. Iest	75	1
Merlin Kennedy	50	1
Ward Kramer	150	2
Cyril Mamath	50	1
Lewis Monchamp	6	1
TOTAL	1,031	20

Records of daily mean releases from Roberts Reservoir are presented in Appendix B, and are shown graphically on Plate 2, "Hydrographs of Pit River near Canby and Roberts Reservoir Releases - 1960 Season".

No water was available for wild-type flood irrigation from the natural flow of the Pit River from July 20 until September 1. After this date, there was an adequate supply to satisfy all second priority rights.

The computed values of daily mean discharge of Pit River near Canby during 1960 are presented in Appendix B

and are also shown graphically on Plate 2, "Hydrographs of Pit River near Canby and Roberts Reservoir Releases, 1960 Season". Precipitation data for the Big Valley area are shown in Table A-2.

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 had 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 to a low of 30 percent of allotments during the latter part of July. Thereafter, the flow remained nearly constant for the remainder of the season.

Butte Creek Service Area

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 Supreme Court of Butte County, 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 1960, this condition was met by regulation of Parrott Dam.

Water stage recorders were maintained on Compton-Entler Ditch, Marybill Ditch, Durham Colony Ditch, Dayton Ditch at Edgar Slough, and Parrott Ditch to aid in the distribution of water from Butte Creek. The Pacific Gas and Electric Company maintains a record of flow of Hendricks Canal. The records of daily mean discharge for the most significant of these stations are presented in Tables B-4 through B-8. 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 on Cow Creek until July 10. At that time allotments were cut to 70 percent, then reached a low of 25 percent by the end of the season.

On July 10 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. The water supply in Cedar Creek was such that only stock water was available from the middle of July to the end of the season. No water available to the lower water users after the middle of July.

Clover Creek. Water was available to satisfy 100 percent of allotments until July 29 when the allotments were reduced to 90 percent. The flow steadily decreased until August 10 when water was available for 70 percent of allotments. Thereafter the flow remained nearly constant.

A Parshall flume and automatic headgate were installed on the Mill Ditch during the 1960 season.

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, 1960, 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 in July of approximately 65 percent. During August and September the flow remained at this level.

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-11.

Indian Creek Service Area

Distribution of water in the Indian Creek Service Area during the 1960 irrigation season followed the practices of past seasons in accordance with the allotments and priorities set forth in the Indian Creek Decree.

Automatic water stage recorders were operated by the department on Wolf Creek, Lights Creek and Indian Creek.

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 next one and a half months, the water supply gradually diminished and by the end of July, the third priority users were receiving only 50 percent of allotments. The Herman Posch and C. G. Fredrickson Ranches continued to use the pump which was 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 on the Dee and Ruby Dodge Ranch.

Lights Creek and tributaries. The flow of Lights Creek was adequate to supply all demands through May. Thereafter the flow gradually decreased until the end of June, when the supply was sufficient to supply only irrigation allotments to the Freeman-Bates and DeFanti-Smith ditches. Close regulation of these diversions was required throughout the remainder of the season. By the end of July, water was available above the county road for only the Freeman-Bates Ditch. After July water did not reach the DeFanti-Smith Ditch.

Below the county road, stock water was available for the Peter-Lower Ditch throughout the season.

The Burns diversion was not used during the 1960 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

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. In addition, recorders were maintained by the watermaster 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 available to supply all demands until April 7. From that date until

about May 1 the flow decreased rapidly, after which the rotation was discontinued and water diverted by the owners of the first priority allotments.

Smithneck Creek. Water was available to satisfy all demands until April 2, after which a rotation schedule was put into operation on all three channels below Loyalton. Rotation continued until about June 1 when the entire flow of the creek was required to supply first priority rights above Loyalton.

West Side Canal Group. The West Side Canal Group as defined in Schedule 7 of the decree consists of Hamlin, Miller and Turner Creeks. The water supply in these streams was sufficient to meet all demands until about June 10, 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 June 10 until the latter part of September. Stock water was maintained throughout the Turner Creek channel during the entire season.

Fletcher Creek and Spring Channels. The Sierra Valley Water Company imported a total of 6,336 acre-feet of water through the Little Truckee Ditch during the period May 2 - September 30. Water was distributed to the shareholders in accordance with Schedule 9 of the Middle Fork Feather River Decree.

Pursuant to the order of the District Court of the United States in Decree No. 5597, entered October 24, 1958, the discharge of Little Truckee Ditch is measured at the point of diversion.

Webber Creek and tributaries. Most of the water users on Webber Creek have shares in the Sierra Valley Water Company and received Little Truckee River water to supplement their supply from Webber Creek. Close regulation was necessary about the middle of July to maintain stock water from that time to about August 5, after which the supply became inadequate to furnish stock water and the users had to depend on wells.

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 right to store and release this water is not included in the decree. However, the Happy Valley Water Company, owner of the 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

these two measuring devices 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 1960 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-15.

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 1960. The location and type of control for each are shown in Table 6.

TABLE 6

RECORDER STATIONS IN NORTH FORK PIT RIVER SERVICE AREA - 1960

Recorder 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
Linville Creek at Old Power House	rated section
Franklin Creek above Diversions	4-foot rectangular weir
Joseph Creek below Couch Creek	rated section
Thoms Creek at Cedarville-Alturas Highway	rated section
Gleason Creek near Jones Ranch	3-foot rectangular weir
Parker Creek at Fogarty Ranch	rated section
Shields Creek above Diversions	rated section
Parker Creek above Highway 395	rated section
North Fork Pit River below Thoms Creek	rated section
North Fork Pit River near Alturas	rated section

The records of the daily mean discharge at these stations are presented in Tables B-23 through B-35 and B-37. The table of the flows in Parker Creek and North Fork Pit River is presented in Table B-36.

New Pine Creek. Water was available for third priority allotments until about the middle of June. From then until the middle of August, water was available for only first and second priority allotments.

Cottonwood Creek. The flow of Cottonwood Creek was sufficient to satisfy third priority rights until about June 15 after which water was available for only first priority allotments. From August 7 until the end of the season all the water was diverted in the Larkin Main Ditch.

Davis Creek. The flow of Davis Creek was sufficient to supply all allotments until the latter part of June. The flow then decreased steadily until mid-July. Sufficient flow to satisfy the first and second priority rights was available throughout 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. By the middle of May 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. The flow in Franklin Creek was sufficient to meet all priority allotments until about May 5. The flow then decreased slowly until about July 8 when water was available for only first and second priority allotments. The supply remained nearly constant for the remainder of the season.

The flow in Joseph Creek was sufficient to satisfy all allotments until about May 6, decreasing gradually until about July 10 when water was available for only first priority allotments. By the middle of August the water supply was sufficient to satisfy approximately 50 percent of first priority rights.

Thoms Creek. The flow in Thoms Creek was sufficient to meet all rights until July 2, decreasing gradually until August 8 when water was available for 40 percent of first priority allotments.

Gleason Creek. The flow of Gleason Creek was sufficient to meet first and second priority rights until June 2. The flow then decreased gradually until it ceased on June 17.

Parker Creek. The flow in Parker Creek was sufficient to satisfy all rights until July 13. From then until

the end of the season the flow gradually decreased, reaching a low of 20 percent of third priority allotments by the middle of September.

The Dorris Reservoir Ditch from Parker Creek was allowed to divert water until June 5.

North Fork Pit River. The flow in the North Fork Pit River was sufficient to satisfy first and second priority rights until June 8. The flow declined until about July 6 when no first priority water was available above the junction with Parker Creek.

Seiad Creek Service Area

Only four diversions from Seiad Creek were in use during the 1960 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. On 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.

Shasta River Service Area

To obtain records of stream flow and to facilitate water distribution during 1960, 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 - 1960

Stream Gaging Station	Type of control
Beaughan Creek below International Paper Company mill pond	2-foot Parshall flume
Carrick Creek at Highway 97	3-foot rectangular weir
Miller 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 district and the several parties that have water rights to the natural flow. 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 April 13 and continued throughout the season. Data on Dwinnel Reservoir operation during the 1960 season are set forth in Table 8. Owners of rights to natural flow of the Shasta River received their complete allotments in the amounts shown in Table 9.

TABLE 8

OPERATION OF DWINNELL RESERVOIR - 1960
(In acre-feet)

Date	Storage	Change in storage	Inflow to reservoir	Total draft	Measured release	Spill seepage and evaporation
April 1	20,900					
		-1,700	2,049	3,749	1,698	2,051
May 1	19,200					
		-3,400	1,964	5,364	3,093	2,271
June 1	15,800					
		-4,700	1,530	6,230	3,700	2,530
July 1	11,100					
		-5,250	511	5,761	3,954	1,807
August 1	5,850					
		-3,450	457	3,907	2,778	1,129
Sept. 1	2,400					
		-1,050	495	1,545	782	763
Oct. 1	1,350					
TOTALS		-19,550	7,006	26,556	16,005	10,551

TABLE 9

DELIVERIES TO NATURAL FLOW WATER
RIGHT OWNERS BELOW DWINNELL RESERVOIR

Name of water right owner	Allotment as per agreement, in acre-feet	Amount delivered from Dwinnell Reservoir	
		Acre-feet	Percent of allotment
John W. Taylor	1,200	1,200	100
Marvin Miller and Inez M. Miller	924	924	100
W. W. Valentine, Jr.	596	596	100
K. K. Waters and Emily S. Waters	464	464	100
James Warren	198	198	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 at 6.92 second-feet. This amount 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.

Carrick Creek. There was sufficient water to supply all allotments until June 1, thereafter water was regulated to fifth and sixth priority rights. The seventh priority right received water on occasions, usually during haying, or when some other user was not diverting.

Computed measurements of Carrick Springs consist of the summation of the flow in the two upper ditches and the flow of the creek below the ditches. The computed measurements made during 1960 are presented in the following tabulation.

Date	Discharge in second-feet
May 11	8.5
June 16	7.4
July 11	7.4
August 11	7.4
September 20	7.4

Parks Creek. Water was available for 70 percent of all priority rights during April. Through May the flow decreased steadily until the end of June when water was no longer available for the Edson-Foulke Yreka Ditch.

Lower Shasta River. Regulation of the lower portion of the Shasta River began June 13 when it was necessary to limit the water diverted by the Grenada Irrigation District. The shortage continued until the middle of September. Once

during the season, it was necessary for the Grenada Irrigation District to be limited to 12 cubic feet per second; this condition, however, was only for a short period. The district was able to average about 23 cubic feet per second during the season, which is about 57 percent of their allotment.

Several meetings were held with the decreed water right owners and the riparian land owners during the season. The various water rights were explained to those users for their comments. As a result of the discussion, a tentative schedule of allotments and map of irrigated lands were prepared.

Little Shasta River. Because of the insufficient water supply, regulation of Little Shasta River was necessary on April 1. On that date the system was regulated to 100 percent of fifth priority allotments. Thereafter the available water for fifth priority allotments slowly decreased throughout the remainder of the season.

The discharge of Little Shasta River near Montague is presented in Table B-41.

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 are shown in Table 10.

TABLE 10

PERCENT OF STORED WATER USED BY WATER USERS
ON SOUTH FORK PIT RIVER - 1960

Present shareholder	Shareholder under decree No. 3273	Percentage
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. F.	16.51
H. C. Cattle Co.	Christensen, V. F.	14.91
McGarva, Peter and McGarva, Phyllis	McGarva, John and McGarva, Peter Gaustad, 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, Bernadine	Hughes, W. H. and Van Loan, D. E.	5.06
Williams, Gary and Williams, Theresa	Williams, Gary and Williams, Theresa	2.51
	Total Percentages	100

Water was released from West Valley Reservoir on June 6 and was continuous thereafter.

Data on the daily mean releases from the reservoir and the daily mean discharge of the South Fork Pit River near Likely as obtained from the United States Geological Survey are presented in Table B-50. Hydrographs of the flow of Pit River near Likely and the releases from West Valley Reservoir are shown on Plate 3.

Pine Creek near Alturas. 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 near Alturas below Power House 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 50,000 acre-feet at the beginning of the irrigation season. Records of the daily mean discharge of Pit River near Canby and near

Alturas are presented in Tables B-1 and B-52, respectively. Hydrographs of Pit River near Alturas, Pit River near Canby, and releases from Big Sage Reservoir are shown on Plate 4.

Surprise Valley Service Area

Bidwell Creek. The flow in Bidwell Creek increased during March and April, reaching a peak flow of approximately 75 cubic feet per second during the first week of May. About the first of June the available water supply began decreasing rapidly, reaching a low in August of 3.6 cubic feet per second. From then until the end of the season, the available supply remained nearly constant.

Numerous diversion structures consisting of both headgates and measuring devices were built in the fall of 1960. The location and type of each structure is shown in Table 11.

Mill Creek. Stream flow averaged approximately 35 cubic feet per second during the first two weeks in April and dropped off rapidly to 8 cubic feet per second by the first of May. During May, the stream increased to a peak of approximately 53 second-feet. It decreased gradually until by the first of June there was a flow of approximately 32 second-feet, reaching a low by the end of the season of 1.6 second-feet.

TABLE 11

DIVERSION STRUCTURES (CONCRETE TURNOUTS)
CONSTRUCTED ON BIDWELL CREEK
DURING 1960

Name of diversion system	Diversion No. on DWR map	Headgate diameter	Size of Parshall flumes
Peterson-Bucher Ditch	5	18"	1'0"
Granville-Peterson Ditch	7	18"	1'0"
Bucher-Lower Ditch	11	18"	2'0"
Siebeck Ditch	10	30"	2'0"
Ward-Sagehorn-Dodson Ditch	21	24"	2'0"

Soldier Creek. Distribution of water on Soldier Creek began on March 19. The maximum flow of the creek occurred early in May and reached a low of 2.2 second-feet during July. Flood flows, due to cloudbursts, caused considerable damage to diversion dams during the season.

A two-foot Parshall flume was constructed by Mr. Daniels during the season. A headgate for diversion No. 11 was also constructed by Mr. Daniels.

Pine Creek. Distribution of water on Pine Creek began on March 20 when the entire flow was diverted into the North Channel. Surplus water available several times during the season, due to heavy precipitation, caused some flooding. By June 1, the flow had decreased to 1.6 second-feet. By the third week in June the flow had ceased.

Cedar Creek. The flow of Cedar Creek reached a high during the first part of April. Thereafter, the stream decreased slowly until the middle of June when water was available for first priority allotments. Flood damage resulting from cloudbursts made it necessary to construct several temporary wooden weirs at points of diversion on Cedar Creek.

Deep Creek. There was sufficient flow in North Deep Creek to supply first priority rights until May 12. From then until the end of the season, the flow decreased gradually, reaching a low of 0.30 cubic foot per second which was adequate to furnish most of the users with stock water throughout the season.

Distribution of water on South Deep Creek began on April 4. The stream reached its high daily mean flow of 18 cubic feet per second during the second week of April dropping gradually to 3.5 cubic feet per second by the end of April. The stream again climbed to approximately 18 second-feet during May, after which it decreased gradually throughout the remainder of the season, reaching a low of 0.30 cubic foot per second.

Construction on South Deep Creek during the 1960 season consisted of building a concrete dam in the Sharp-Messier Ditch to replace an old log dam at this location.

Owl Creek. Maximum flow was reached during the first part of June. Thereafter the flow decreased to one cubic foot per second by the last of August.

Construction of the new channel, proposed by the Soil Conservation Service, was undertaken in October. In the course of construction, some of the Parshall flumes were destroyed and others made unusable, and it will therefore be necessary to construct new measuring flumes in the near future.

Rader Creek. Distribution of water began on April 6, at which time water was available for approximately 85 percent of second priority allotments. By the second week in June, the stream had reached a high of approximately 75 cubic feet per second. From then until the end of the season the flow decreased gradually reaching a low of 1.1 cubic-feet per second.

Eagle Creek. The runoff of Eagle Creek held fairly steady in April, increased in May, and reached a peak of 47 cubic feet per second in June. The flow decreased rapidly until by the middle of August, it reached a low of approximately 1.6 cubic feet per second.

Construction on Eagle Creek during the 1960 season consisted of building a diversion dam at the Johnston Ditch, a diversion dam and two-foot Parshall Flume for the Kelly Ditch, and a concrete headgate and two-foot Parshall Flume for the Meyers Ditch.

Emerson Creek. Distribution of water on Emerson Creek began on April 5. The flow reached a high of approximately 17 cubic feet per second during the second week in May

where it held nearly constant until the first week of June. From then until the end of the season the flow decreased gradually, reaching a low of 2.6 cubic feet per second.

Susan River Service Area

Water supply was the lowest on record in the history of the Susan River service area. The three major reservoirs were empty by June 19 and at no time during the irrigation season were all allotments satisfied. Honey Lake was dry for the first time since 1948. Data on flow of water at various points throughout the service area are presented in Tables B-65 through B-75.

Willow Creek Valley. The Barron Ranch delivered water to the downstream users through the Eagle Creek bypass canal. Adequate water was available during the haying season to satisfy all requirements.

Lower Willow Creek and Susan River below Old Colony Dam. Irrigation in this area commenced in March. The flow gradually diminished until July 1, reaching a low of about 14 cubic feet per second where it remained until the end of the watermaster season.

Lassen, Gold Run, Hills, and Piute Creeks. Sufficient water was available in Lassen and Holtzclaw Creeks to satisfy all demands during April and May. During June the flow gradually decreased. By July 1 the stream was dry.

The Lost Meadows Golf Club built a diversion structure in Holtzclaw Creek.

Hills Creek. Sufficient water was available to supply 100 percent of allotments on Hills Creek during April and May. The stream flow decreased gradually until July 1 when no water was available.

The Emerson Reservoir was enlarged to impound 200 acre-feet of water.

Susan River. At the beginning of the irrigation season the amount of water available in Susan River was not sufficient to meet all requirements. The flow diminished rapidly until July 1, when water was available for only a portion of first priority allotments.

Three diversion structures were built on the Old Susan Channel for the purpose of controlling and measuring water. These structures are located at the head of the Jensen Slough, Brockman Slough, and Smith Ditch. The Bantley and Shanks Dams on Susan River were repaired.

A record of the daily mean discharges of Susan River at Susanville is shown in Table B-65. A hydrograph of the same station is presented on Plate 5, "Hydrograph of Susan River at Susanville and Stored Water Available for Rediversion at Susanville, 1960 Season".

Storage Reservoirs. Releases from McCoy and Hog Flat Reservoirs commenced in late April. By June 19 both

reservoirs were dry. The Lower Ridenour Reservoir was repaired and enlarged to impound 200 acre-feet.

Baxter Creek. The water supply in Baxter Creek was sufficient to satisfy all demands in early April; however, the flow diminished rapidly until by early June only stock water existed. By July no water was available for stock water.

Daily mean discharge of Baxter Creek above all diversions is presented in Table B-73.

Parker Creek. Water supply was sufficient to satisfy all allotments during April. The supply diminished rapidly with no water reaching Highway 395 after May 20.

CHAPTER IV. CHANGES OF OWNERSHIP OF LANDS AND WATER RIGHTS

Changes in ownership occurring between January 1, 1960 and December 31, 1960, are shown by service area in the following tabulation.

CHANGES OF OWNERSHIP OF LANDS
WITHIN
WATERMASTER SERVICE AREAS,
JANUARY 1, 1960 TO DECEMBER 31, 1960

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
		Butte Creek	
13-12	Konyn, Peter J.	Konyn, Peter J., Amerio, Peter and Giaconda Durham	0.40
13-21-1	Michal, Leon	Henneman, Jake L. Rt. 3, Box 53, Chico	0.36
13-14-3	Vlatkovich, Steve	Vernoga, Stephen Durham	0.447
		Cow Creek	
4-84	Boyle, Carrol L.	Cooper, Emma, et al. c/o Boyle, Tilden Box 2, Palo Cedro	0.25
4-53	Bryant, Sam A. and Dorothy	Gumm, Melvin L. and Mildred M. 2911 Anita St. Redding	0.86
4-12	Coffman, J. M., and Eleanor M.	Coffman, C. W., Jeanette and Jake W. Bella Vista	1.25
4-51	Coronado Copper and Zinc Co.	Selby, Ernest E. and Nead, Hubert C. P. O. Box 1719 - Redding P. O. Box 26 - Redding	0.59
4-79	Irvin, B. E. and Myrtle W.	Peak, Bill Bella Vista	0.75

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
4-36	Newill, James	Pierson, A. W. 6871 Eastside Rd. Redding	0.175
		Gai, Lawrence E. 379 Cavour St. Oakland	0.175
4-44	Preston, George S.	Preston, George S. and Klein, Fredrick	0.225
4-27	Rogers, Floyd S.	Coker, George B., M. N. and C. A. 1654 Jacqueline St. Anderson	0.47
4-59 4-72	Rutherford, George	Rutherford, Ted L. and Lois C. Bella Vista	0.42
4-85-2	Ryan, Charles and Melba	Selby, Ernest E. and Adele P. O. Box 1719, Redding	0.115
4-33	Talbott, W. N. and Virginia	Hamm, R. F. R. R. 1, Box 800 Red Bluff	1.15
4-82	Thomas, C. H., M., and R. R. Gasser, V. E. and B. B.	Thomas, Roy R. 2953 Churn St., Redding Peterson, Elmer A. and Mearl 1002 Isobel St., Burbank	0.37
4-46	Walker, A. H.	Van Dyke, Sylvan and Dorothy Rt. 1, Box 3921 Redding	0.10
		<u>Hat Creek</u>	
2-27-2 2-28	Hermann, Helge Carl Hermann, Hazel Dean	Hat Creek Properties, Inc.	3.64

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
2-22-2	Smith, Ward B. and Smith, Gladys Gertrude	Ryan, Charles and Catherine	10.54
2-22-1	Smith, Ward B. Smith, Gladys Gertrude	Smith, Ward Bond Smith, Gladys Gertrude	0.50
2-26	Stevenson, Thad I.	Hat Creek Hereford Ranch	4.687
2-29-2	Stevenson, Thad I. et al.	Hat Creek Hereford Ranch	0.575
		Indian Creek	
16-16	Krug, R. H. and Krug, Alice	Schlagel, Henry H. and Schlagel, Hannah 7270 Crescent Ave. Buena Vista	1.50
16-28	Wheeler, Wesley T. and Wheeler, Idella C.	Chapman, Robert E. and Chapman, Helen G. 43 Prospect Belmont Shore	1.05
		Middle Fork Feather River	
10-14	Maddalena, Columbina	Maddalena, Louis K. and Maddalena, Hazel A. Sierraville	1.55
10-28 10-32 10-34 10-37 10-38	Nichols, A. W.	Nichols, Ruth S. Rt. 2, Box 210 Reno, Nevada	18.61
10-26 10-124	Scolari, Ida A.	Wiley, John and Wiley, Virginia 1608 Indiana St. Whittier	1.59

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
		North Fork Cottonwood Creek	
3-6	Bartley, R. W. et al.	Wixson, S. L. and Catherine 2615 So. Bonnyview Dr. Redding	1.25
9-107	Brown, Gerald F. and Aletha Neff	Weber, Herman C. and John D.	3.20
9-90	Hays, Clyde and Ruth	Brown, C. M. and Betty	1.25
9-110	Neff, D. C. W. and Neff, Lula G.	Weber, Herman C. and Weber, John D.	1.60
		Shackleford Creek	
14-10	Dysert, Roy A. and Newell S.	Dysert, Ray A. Admin. and et al.	0.30
14-13	Mulloy, Cornelius J. and L. Dennis	Mulloy, L. Dennis Note: Mulloy, L. Dennis has tract 14-7 2.93 cfs 80; same address	
		Shasta River	
5-65-2	Carpenter, Fred W. and Jewell E.	Liebe, Alfred and Gerda P. O. Box 133, Gazelle	0.95
5-8	Dreyer, Anna	Dreyer, Anna Irving, Dorothy H. Blake, Helene H. Rt. 1, Box 15, Montague	1.09
5-84-1	Neal, A. W. and Neal, Alma	Ordway, Samuel H. and Ordway, Anna W. Conservation Foundation 30 E. 40th, N. Y. 16, N. Y.	3.47
5-71-5-72	Nelson, Gus V.	Nelson, Katherine c/o Leon McConnell Etna	4.20

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
5-61	Quigley, Fred Smith, Warren V.	Warren, James C. and Imogene Rt. 4, Box 84 Montague	1.15
5-19-1	Rohrer, J. B.	Rohrer, Brice Montague	0.545
5-19-2	Rohrer, J. B.	Rohrer, James C. Montague	0.545
5-27	Rohrer, J. B.	Crebbin, Helen Rohrer 650 W. Lennox St. Yreka	1.65
5-85	Sullivan, Lawrence E. and Myrtle P.	Ordway, Samuel H. and Anna W. 155 E. 72nd St., New York 21, New York	1.11
5-87	Thomas, Grace P.	Kershaw, Walter W. and Dorothy W. Chubb, Barbara Kershaw 2500 Walkers Lane Salt Lake City, Utah	5.30
5-112	Vanderbilt, George and Zaballa, Anita	Vanderbilt, George Shadow Valley Ranch Edgewood	1.975
5-43-1	Watson, Donald E. and Ilene D.	Williams, George E., Jr. and Myrtle F. and George III Madeline	3.83
		South Fork Pit River	
7-50-1	Dorris, A. D.	United States of America	7.85
7-51	Dorris, G. B.	United States of America Fish and Wildlife Service Box 3737, Portland, Oregon	15.00
7-53	Stevens, Barre L. and Stevens, Phyllis, G.	Rice, J. B. and Rice, Kate L.	3.00

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
		Surprise Valley	
8-166	Boyer, John M.	Powers, Harold J. Eagleville	4.40
8-197	Dodson, Elbert F. and Dodson, Barbara	Sagehorn, Leo and Sagehorn, Marie Fort Bidwell	1.88
8-172 8-176	Harris, Jacklyn E. and Harris, Forrest	Harris, Sam and Harris, Joe Eagleville	2.60
8-161-2	Harden, Harold and Harden, Ava Jo	Harden, Naomi C.	0.02
8-85	Heard, Kennon and Ruth	Sharrow, Larry Cedarville	3.00
8-14 8-15	Heard, Minnie T.	Bullen, Elba M. and Bullen, Ila R. Lake City	1.24
8-74	Norris, Virginia A. and St. John, and Norris, Ardyth	MacDonald, Forest and MacDonald, Irene Box 574, Ukiah	0.12
8-69 8-73	Olsen, Ted M., Jr. and Olsen, Eileen	Henderson, Grady W. and Henderson, Margie Lee Alturas	1.80
8-85	Olsen, Ted M., Jr. and Olsen, Eileen	Heard, Kennon and Heard, Ruth	3.00
8-165 8-183	Parman, William G. and Stephens, Jesse W.	Stephens, Jesse W.	2.70
8-75	Sanders, Harry C. and Sanders, Cleva M.	Doherty, Bonnie 1253 - 24th St. Hermosa Beach	0.08
8-119	Snell, Charles N.	Berryessa, Edward B. and Berryessa, Sharon D. Eagleville	0.95

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
8-87 8-88	Van Ness, H. C. and Van Ness, Elizabeth	Allen, Glen M. and Allen, Helena Cedarville	2.35
8-174	Ward, Ral L. and Ward, Justine M.	Harris, Sam and Harris, Joe Eagleville	0.31
		Susan River	
12-162	Ahern, William and Zella	Kepley, Nele R. Box 142, Janesville	0.02
12-4	Bengoa, Louie	Giubergia, Frank Susanville	0.002
12-108 12-114	Cliff Cattle Co.	Triami Cattle Co.	12.95
12-65-4	Emerson, Hayden	Mallery, Milton A. and Patricia	1.08
12-123	McCallister, Fred R. and Beulah	McCallister, R. F. and Beulah	0.15
12-34	McVicar, Percy J. and Caroline	Curler, Ben V. and Fannie B.	0.03
12-169 12-171	Mulroney, Wanda	Mulroney, Merlyn E. and Wanda M.	1.57
12-32-2	Pace, James R. and Edith	Pace, James R. and Phylis R.	0.013
12-41-2	Padilla, Edward J. and Zella	Burr Real Estate Co. Theatre Bldg. Susanville Burr, Ferrill	0.70

Tract number	Name of water right owner appearing in 1960 statement	Name and address of water right owner appearing in 1961 statement	Quantity of water, in second-feet
12-84	Raker, Marie	Raker, George C. and Marie C.	1.50
12-77-2	Saroian, Dixie R.	Raker, Royce A. Star Route #3 Susanville	0.25
12-178	Seley, John F., James F., John T.	Triami Cattle Co. c/o Frank Rue Plumas Rd. Arboga	1.81
12-14-2	Van Tassle, Bessie and George	Farris, George A.	0.04

APPENDIX A

PRECIPITATION RECORDS

APPENDIX A

PRECIPITATION RECORDS

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TABLE A-1

PRECIPITATION AT BIEBER, LASSEN COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.80	0.12
November	1.75	0.00
December	2.21	1.05
January	2.44	2.61
February	2.35	3.73
March	1.86	2.49
April	1.28	0.84
May	1.28	1.55
June	0.41	0.10
July	0.23	0.21
August	0.14	0.00
September	0.48	0.12
TOTALS	16.23	12.82

* For period of record (1929-1960)

TABLE A-2

PRECIPITATION AT HAT CREEK POWERHOUSE NUMBER 1
SHASTA COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.30	0.18
November	1.82	0.00
December	2.53	1.01
January	2.45	2.84
February	2.91	5.19
March	1.92	1.50
April	1.55	0.76
May	1.20	0.96
June	0.80	0.36
July	0.16	0.05
August	0.15	0.00
September	0.44	0.59
TOTALS	17.23	13.44

* For period of record (1921 to date)

TABLE A-3

PRECIPITATION AT CHICO, BUTTE COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.30	0.00
November	2.65	Trace
December	4.50	1.54
January	4.70	6.35
February	4.15	3.75
March	3.21	3.11
April	1.78	1.96
May	0.99	1.34
June	0.41	0.00
July	0.02	0.07
August	0.03	0.00
September	0.48	0.04
TOTALS	24.22	18.16

* For period of record (1870 to date)

TABLE A-4

PRECIPITATION AT REDDING, SHASTA COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	2.26	0.10
November	4.06	0.02
December	6.48	1.86
January	7.19	8.42
February	5.99	10.16
March	4.96	5.67
April	2.93	1.43
May	1.83	3.23
June	0.86	0.09
July	0.01	0.00
August	0.06	0.00
September	0.67	0.00
TOTALS	37.40	30.98

* For period of record (1875 to date)

TABLE A-5

PRECIPITATION AT GREENVILLE, PLUMAS COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	2.61	0.04
November	4.81	0.00
December	5.93	2.43
January	8.89	7.13
February	5.44	8.29
March	6.47	7.43
April	2.84	0.92
May	1.71	1.63
June	0.75	0.00
July	0.35	Trace
August	0.21	0.02
September	0.94	0.07
TOTALS	40.95	27.96

* For period of record (1943 to date)

TABLE A-6

PRECIPITATION AT VINTON, PLUMAS COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	0.52	0.01
November	1.02	0.00
December	1.88	0.83
January	1.99	1.85
February	1.31	3.06
March	1.14	1.97
April	0.89	0.04
May	0.64	0.35
June	0.83	0.00
July	0.06	0.31
August	0.10	Trace
September	0.25	Trace
TOTALS	10.63	8.42

* For period of record (1940 to date)

TABLE A-7

PRECIPITATION AT ALTURAS, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	0.99	0.36
November	1.23	Trace
December	1.51	0.67
January	1.79	1.74
February	1.37	2.24
March	1.40	1.73
April	1.11	0.99
May	1.19	1.16
June	0.79	Trace
July	0.40	0.37
August	0.22	0.04
September	0.53	0.20
TOTALS	12.53	9.50

* For period of record (1904 to date)

TABLE A-8

PRECIPITATION AT HAPPY CAMP, SISKIYOU COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	3.40	0.89
November	6.81	0.44
December	8.63	4.53
January	8.05	6.77
February	7.23	12.70
March	5.34	11.32
April	2.63	2.17
May	1.71	5.45
June	0.83	0.00
July	0.35	0.00
August	0.12	0.00
September	0.67	0.00
TOTALS	45.77	44.27

* For period of record (1914 to date)

TABLE A-9

PRECIPITATION AT FORT JONES, SISKIYOU COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.78	0.09
November	2.88	0.00
December	3.66	1.25
January	3.09	2.31
February	2.83	7.30
March	2.41	3.29
April	1.12	0.32
May	1.24	1.56
June	0.74	1.14
July	0.39	0.01
August	0.29	0.00
September	0.43	0.00
TOTALS	20.86	17.27

* For period of record (1936 to date)

TABLE A-10

PRECIPITATION AT YREKA, SISKIYOU COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.23	0.06
November	2.39	0.05
December	2.93	0.81
January	2.88	1.92
February	2.36	6.75
March	1.65	2.35
April	1.01	0.57
May	1.03	0.95
June	0.64	0.21
July	0.36	0.08
August	0.26	0.00
September	0.48	0.00
TOTALS	17.22	13.75

* For period of record (1871 to date)

TABLE A-11

PRECIPITATION AT JESS VALLEY, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.31	0.76
November	1.62	Trace
December	1.84	0.72
January	1.91	2.00
February	1.90	2.23
March	1.89	2.11
April	1.66	1.81
May	1.93	1.93
June	1.52	0.27
July	0.34	1.65
August	0.25	0.04
September	0.69	0.28
TOTALS	16.86	13.80

* For period of record (1929 to date)

TABLE A-12

PRECIPITATION AT LAKE CITY, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.80	0.65
November	2.16	Trace
December	2.77	1.12
January	2.78	2.50
February	2.11	4.23
March	2.25	3.09
April	1.60	1.83
May	1.62	3.16
June	1.41	0.08
July	0.21	0.76
August	0.20	0.06
September	0.55	0.13
TOTALS	19.46	17.61

* For period of record (1929 to 1960)

TABLE A-13

PRECIPITATION AT CEDARVILLE, MODOC COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.05	0.21
November	1.49	0.02
December	1.55	0.44
January	1.74	1.60
February	1.51	2.78
March	1.46	2.46
April	0.94	0.95
May	1.00	1.84
June	0.74	0.37
July	0.44	0.93
August	0.17	0.05
September	0.48	0.22
TOTALS	12.37	11.87

* For period of record (1894 to date)

TABLE A-14

PRECIPITATION AT SUSANVILLE AIRPORT, LASSEN COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.02	0.01
November	2.05	0.00
December	2.91	0.72
January	2.51	2.01
February	2.33	3.78
March	1.56	1.40
April	0.85	0.51
May	0.85	0.51
June	0.69	0.00
July	0.16	0.14
August	0.08	0.03
September	0.30	Trace
TOTALS	15.31	9.11

* For period of record (1940 - 1947)

TABLE A-15

PRECIPITATION AT SIERRAVILLE, SIERRA COUNTY, CALIFORNIA

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.38	0.00
November	2.77	Trace
December	3.82	1.59
January	4.97	4.66
February	3.88	7.47
March	2.88	4.12
April	1.65	0.55
May	1.10	0.84
June	0.60	0.00
July	0.24	0.22
August	0.15	0.00
September	0.37	Trace
TOTALS	23.81	19.45

* For period of record (1909 to date)

TABLE A-16

PRECIPITATION AT LAKEVIEW, OREGON

In inches

Month	Average precipitation*	1959-1960 precipitation
October	1.14	0.69
November	1.43	Trace
December	1.99	0.65
January	1.73	1.79
February	1.61	2.64
March	1.49	2.18
April	1.17	1.16
May	1.45	2.30
June	1.38	Trace
July	0.18	0.13
August	0.16	0.02
September	0.52	0.02
TOTALS	14.25	11.58

* 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

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	172	63	112	30	69	49
2	168	72	38	17.0	35	37
3	192	75	26	21	22	26
4	209	142	31	17.0	58	23
5	209	204	49	20	106	17.0
6	227	268	63	23	78	15
7	222	240	63	19.0	52	17.0
8	272	218	61	58	58	18
9	272	272	52	58	34	24
10	240	245	40	54	31	90
11	204	196	30	58	23	106
12	192	122	24	54	24	99
13	168	42	25	42	20	106
14	160	90	20	34	16.0	136
15	180	54	10.0	19.0	13.0	99
16	168	63	15.0	19.0	13.0	78
17	125	61	20	4.0	20	112
18	112	61	22	4.2	24	78
19	109	61	101	7.8	22	72
20	93	38	276	7.4	19.0	66
21	49	32	150	7.8	17.0	52
22	52	26	93	8.6	28	31
23	63	61	115	8.2	63	25
24	78	90	168	10.0	160	21
25	90	119	146	7.4	109	21
26	93	179	168	82	122	24
27	109	346	120	7.8	93	23
28	128	258	81	7.4	63	23
29	63	227	58	7.0	61	24
30	84	188	45	12.0	66	24
31	---	168	---	24	54	---
Mean	150	138	74.1	21.8	50.7	51.2
Runoff acre-feet	8,916	8,476	4,400	1,336	3,114	3,041

Total = 29,280 acre-feet

TABLE B-2

DAILY MEAN DISCHARGE OF PIT RIVER NEAR BIEBER

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	390	145	275	10.0	2.1	0.80
2	368	140	360	8.6	1.9	1.1
3	347	118	147	119	1.8	1.6
4	343	118	86	116	1.4	1.8
5	343	190	64	50	1.3	1.9
6	335	200	58	46	1.0	1.4
7	347	99	54	23	.8	1.0
8	339	95	51	33	.8	.8
9	355	313	44	41	.8	1.0
10	381	335	27	24	.8	1.4
11	355	343	23	12.0	.8	3.4
12	332	271	7.8	7.8	.8	3.7
13	309	239	6.7	6.1	1.0	1.9
14	299	203	6.1	5.5	.8	1.2
15	268	152	8.2	4.4	.8	.8
16	249	77	5.2	5.0	.7	.7
17	292	31	2.9	6.1	.7	5.9
18	236	29	1.6	5.8	.7	11.0
19	157	33	1.1	4.4	.7	6.4
20	27	31	.7	4.0	.7	3.1
21	12.0	53	.6	4.0	.6	1.6
22	19.0	53	.7	3.3	.6	1.9
23	32	73	.8	2.1	.6	1.0
24	23	45	1.1	1.4	.7	.7
25	23	21	4.5	1.6	.7	.5
26	29	16	7.1	1.8	.6	.5
27	31	16	2.1	1.3	.5	.4
28	39	21	1.3	1.4	.4	.6
29	38	23	28	1.8	.5	.8
30	73	30	17.0	2.7	.6	16.0
31	----	60	----	2.5	.8	----
Mean	213	115	43.1	17.9	0.87	2.50
Runoff acre-feet	12,680	7,090	2,560	1,100	54	149

Total = 23,630 acre-feet

TABLE B-3

DAILY MEAN RELEASES FROM ROBERTS RESERVOIR

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1					38	12.0
2					16.0	26
3					---	---
4					12.0	---
5					18.0	---
6					No Releases	
7						
8						
9						
10						
11					25	
12					37	
13					37	
14					18.0	
15					---	
16	No Record	No Record	No Releases	No Releases	No Releases	No Releases
17						
18						
19						
20						
21					---	
22					13.0	
23					20	
24					---	
25			18.0		---	
26			7.6	22	No Releases	
27				37		
28				38		
29				38		
30				38		
31				38		
Mean			0.8	6.8	7.5	1.3
Runoff acre-feet			51	420	465	76

Total = 1,012 acre-feet

TABLE B-4

DAILY MEAN DISCHARGE OF BUTTE CREEK BELOW UPPER COLONY DAM

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1				16.0	6.0	3.0
2				13.0	6.0	3.0
3				8.0	5.0	3.0
4				9.0	4.0	4.0
5				9.0	4.0	4.0
6				6.0	3.6	3.0
7				8.0	3.0	3.0
8				8.0	3.0	3.0
9				8.0	3.0	3.0
10				7.0	3.6	3.0
11				5.0	3.6	3.0
12				5.0	3.6	3.0
13				12.0	3.6	3.0
14			No Record	5.0	3.6	4.0
15				5.0	3.6	4.0
16	No Record	No Record		5.0	3.6	4.0
17				5.0	3.6	4.0
18				5.0	4.6	4.0
19				5.0	8.0	4.0
20			27	5.0	6.0	4.0
21			26	4.0	4.6	4.0
22			23	4.0	4.6	4.6
23			19.0	4.0	4.6	4.6
24			16.0	4.0	4.0	4.6
25			19.0	4.0	4.0	4.6
26			19.0	5.0	4.6	4.6
27			18.0	5.0	4.6	4.6
28			18.0	5.0	4.6	6.0
29			18.0	6.0	4.6	
30			18.0	6.0	4.6	No Rec.
31			---	6.0	4.6	
Mean			20	6.5	4.3	3.8
Runoff acre-feet			438	400	266	211

Total = 1,315 acre-feet

TABLE B-5

DAILY MEAN DISCHARGE OF DURHAM COLONY DITCH

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			No Rec.	56	47	39
2				55	46	39
3			67	58	45	41
4			67	58	44	49
5			67	56	44	47
6			67	57	45	41
7			66	58	44	42
8			65	57	42	42
9			63	58	42	42
10			59	57	42	44
11			61	56	40	44
12			62	55	42	44
13			61	52	44	49
14			63	52	44	49
15			61	52	42	49
16	No Record	No Record	64	50	41	53
17			60	51	40	56
18			60	51	39	56
19			60	50	38	58
20			59	49	38	57
21			55	46	37	55
22			53	45	38	52
23			55	47	37	53
24			56	46	38	50
25			58	45	37	51
26			58	46	39	54
27			58	45	44	56
28			58	46	44	53
29			58	45	43	
30			57	47	44	No Rec.
31			---	49	46	
Mean			63	51	42	49
Runoff acre-feet			3,362	3,158	2,566	2,703

Total = 11,789 acre-feet

TABLE B-6

DAILY MEAN DISCHARGE OF DAYTON DITCH AT EDGAR SLOUGH

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			No Rec.	21	16.0	15.0
2				21	16.0	15.0
3			23	18.0	16.0	13.0
4			23	19.0	16.0	15.0
5			23	16.0	16.0	15.0
6			23	16.0	16.0	15.0
7			23	16.0	16.0	15.0
8			23	16.0	16.0	15.0
9			23	16.0	16.0	15.0
10			23	16.0	16.0	15.0
11			23	16.0	16.0	15.0
12			23	16.0	16.0	15.0
13			23	16.0	16.0	15.0
14			23	16.0	16.0	15.0
15			23	16.0	16.0	15.0
16	No Record	No Record	23	16.0	16.0	15.0
17			23	16.0	16.0	15.0
18			23	16.0	15.0	15.0
19			23	16.0	15.0	15.0
20			23	16.0	15.0	15.0
21			23	16.0	15.0	14.0
22			23	16.0	15.0	14.0
23			23	16.0	15.0	13.0
24			20	16.0	10.0	5.0
25			21	17.0	10.0	0
26			21	17.0	16.0	0
27			21	16.0	15.0	0
28			21	16.0	15.0	No Rec.
29			21	15.0	16.0	
30			21	15.0	16.0	
31			---	15.0	15.0	
Mean			22	16.4	15.3	12.7
Runoff acre-feet			1,245	1,010	940	681

Total = 3,876 acre-feet

TABLE B-7

DAILY MEAN DISCHARGE OF PARROTT DITCH

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			No Rec.	79	72	62
2				79	71	67
3			110	78	71	70
4			115	75	73	79
5			119	75	72	75
6			119	76	71	67
7			126	78	69	64
8			130	77	69	72
9			130	75	71	72
10			135	73	71	71
11			130	73	69	71
12			115	72	70	64
13			122	74	71	57
14			127	75	72	56
15			126	74	70	56
16	No Record	No Record	119	72	70	53
17			105	75	67	49
18			103	72	66	47
19			103	72	66	47
20			101	71	67	49
21			98	74	67	50
22			92	72	66	49
23			89	71	68	49
24			88	71	69	56
25			86	72	65	51
26			86	74	70	47
27			84	69	70	48
28			82	72	69	39
29			78	71	71	
30			78	74	71	No Rec.
31			---	74	71	
Mean			107	74	70	58
Runoff acre-feet			5,932	4,532	4,267	3,241

Total = 17,972 acre-feet

TABLE B-8

DAILY MEAN DISCHARGE OF HENDRICKS CANAL

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			97	58	53	54
2			98	57	53	54
3			98	56	54	64
4			100	55	56	59
5			101	54	55	58
6			99	60	53	56
7			95	58	53	55
8			96	56	53	53
9			91	56	53	54
10			96	55	51	54
11			96	54	50	54
12			94	56	53	54
13			94	57	54	54
14			93	56	54	53
15			93	56	54	52
16	No Record	No Record	87	55	54	54
17			87	55	53	54
18			87	54	54	53
19			82	56	55	53
20			78	55	54	53
21			72	55	54	53
22			67	55	53	53
23			66	53	53	53
24			65	53	52	53
25			64	54	50	53
26			63	55	55	52
27			62	54	55	51
28			61	55	55	52
29			59	55	54	53
30			58	55	53	54
31			---	54	53	---
Mean			83	55	52	54
Runoff acre-feet			4,948	3,400	3,180	3,212

Total = 14,740 acre-feet

TABLE B-9

DAILY MEAN DISCHARGE OF NORTH COW CREEK NEAR INGOT

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	111	103	53	9.6	9.6	4.7
2	106	218	48	10.0	9.6	7.2
3	104	154	45	10.0	9.2	8.0
4	106	150	43	9.6	9.2	7.6
5	104	120	36	9.2	8.8	7.6
6	103	108	35	8.4	8.8	7.2
7	103	125	36	7.6	8.4	6.9
8	99	111	46	6.9	8.4	6.9
9	98	104	33	6.9	8.0	6.9
10	93	99	28	7.6	8.0	6.5
11	95	96	28	7.6	8.8	6.5
12	84	92	25	7.2	9.2	7.6
13	76	80	25	7.6	9.2	6.9
14	84	69	24	7.2	9.2	6.5
15	72	66	22	6.9	9.2	6.5
16	64	63	21	5.2	9.2	6.9
17	63	60	20	6.2	8.0	6.2
18	61	57	20	5.9	6.9	6.2
19	65	53	18.0	5.6	6.9	6.5
20	60	59	16.0	4.9	6.9	7.2
21	60	63	14.0	4.4	7.2	8.0
22	60	55	15.0	4.1	7.2	6.9
23	89	81	14.0	5.6	7.2	6.5
24	99	116	13.0	6.2	7.2	5.9
25	114	108	12.0	7.6	6.9	4.9
26	106	96	11.0	7.6	7.6	5.6
27	182	87	11.0	8.4	8.0	5.9
28	122	78	10.0	7.6	7.6	6.2
29	125	72	10.0	9.2	7.6	6.2
30	98	65	9.6	8.8	8.0	6.5
31	---	60	---	8.4	8.4	---
Mean	93	92	24	7.4	8.2	6.6
Runoff acre-feet	5,566	5,689	1,471	452	505	395

Total = 14,080 acre-feet

TABLE B-10

DAILY MEAN DISCHARGE OF OAK RUN CREEK NEAR OAK RUN SCHOOL

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	8.0	9.0	4.6	2.2	1.7	0.8
2	7.6	20	4.5	2.4	1.5	0.8
3	7.5	12.0	3.8	1.5	1.2	1.5
4	6.8	12.0	3.4	1.8	1.2	0.7
5	6.5	9.3	2.3	1.7	1.2	0.9
6	6.5	8.6	3.3	1.0	0.8	1.9
7	6.5	9.3	2.8	1.3	1.3	2.4
8	6.2	8.0	3.6	1.1	1.5	2.5
9	6.5	7.5	3.4	1.3	1.1	3.0
10	6.5	7.0	3.4	2.0	1.4	3.0
11	5.8	6.8	3.5	1.6	1.6	2.4
12	5.0	6.7	3.2	1.2	1.4	2.5
13	4.7	6.5	3.2	2.0	1.3	2.0
14	5.2	6.4	3.4	1.1	1.0	0.9
15	4.7	4.3	3.3	1.1	0.7	1.3
16	4.4	4.7	3.2	1.0	1.0	2.2
17	4.4	5.2	2.8	0.9	0.5	1.9
18	3.2	5.2	3.0	1.1	0.6	1.2
19	3.6	4.8	2.7	1.2	1.0	1.2
20	3.4	5.6	3.1	0.6	0.3	1.7
21	3.7	6.7	2.2	0.5	0.3	1.7
22	3.7	6.7	2.6	0.8	0.3	1.6
23	8.1	7.8	2.6	1.0	0.9	1.8
24	11.0	9.0	2.0	1.2	1.5	2.5
25	9.2	8.8	3.1	1.5	1.6	2.0
26	9.0	8.0	2.4	1.9	1.2	2.0
27	15.0	7.0	2.6	1.7	1.0	2.5
28	11.0	6.7	2.6	1.0	1.6	2.8
29	10.0	6.2	2.5	1.2	1.6	2.9
30	8.8	5.9	1.9	1.5	0.9	1.8
31	---	5.6	---	1.3	0.8	---
Mean	6.7	7.6	3.0	1.3	1.1	1.9
Runoff acre-feet	402	470	180	83	67	112

Total = 1,314 acre-feet

TABLE B-11

DAILY MEAN DISCHARGE OF HAT CREEK AT U.S.G.S. STATION

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	128	140	190	141	126	115
2	128	147	198	138	123	115
3	128	147	203	138	121	121
4	130	142	203	136	123	119
5	132	138	203	134	123	117
6	138	140	201	134	123	113
7	145	160	196	134	124	115
8	145	167	198	132	124	117
9	147	172	190	130	124	117
10	142	178	190	134	121	117
11	140	188	188	134	119	117
12	136	190	190	134	117	117
13	138	178	190	132	117	117
14	138	174	185	132	117	119
15	138	176	183	132	119	121
16	138	178	188	130	119	119
17	142	174	193	128	117	117
18	147	165	180	128	117	115
19	147	162	175	128	119	113
20	149	174	170	124	121	113
21	153	178	161	124	123	113
22	151	165	158	124	124	113
23	147	158	161	126	126	113
24	140	153	158	126	124	113
25	138	151	158	126	123	113
26	138	160	154	126	121	113
27	138	162	152	124	121	113
28	138	160	149	124	119	113
29	138	167	147	123	117	117
30	138	172	143	128	115	119
31	---	180	---	128	115	---
Mean	140	164	178	130	121	116
Runoff acre-feet	8,320	10,110	10,620	8,000	7,420	6,890

Total = 51,360 acre-feet

TABLE B-12

DAILY MEAN DISCHARGE OF LITTLE LAST CHANCE CREEK NEAR CHILCOOT

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	66	12	4.4	1.6	0.5	0.5
2	60	13	4.1	1.5	0.5	0.5
3	62	12	3.8	1.5	0.4	0.5
4	65	15	4.1	1.5	0.4	0.6
5	67	18	3.8	1.5	0.4	0.6
6	67	14	3.6	1.3	0.4	0.6
7	72	13	3.3	1.3	0.4	0.6
8	62	13	3.3	1.3	0.4	0.5
9	59	12	3.1	1.2	0.4	0.5
10	54	12	3.1	1.2	0.4	0.8
11	50	11	2.9	1.2	0.4	0.7
12	44	11	2.9	1.2	0.3	0.6
13	41	11	2.7	1.0	0.3	0.5
14	38	11	2.7	0.7	0.3	0.5
15	34	10	2.5	0.8	0.4	0.6
16	32	9.8	2.7	0.7	0.3	0.9
17	30	8.5	2.5	0.7	0.4	1.0
18	28	8.5	2.5	0.6	0.4	0.8
19	27	8.1	2.3	0.5	0.3	0.7
20	26	7.0	2.3	0.5	0.4	0.6
21	25	9.0	2.1	0.3	0.3	0.6
22	27	8.1	2.3	0.1	0.5	0.6
23	30	8.1	2.1	0.3	0.5	0.5
24	27	8.5	1.9	0.4	0.3	0.6
25	25	8.5	1.9	0.4	0.2	0.7
26	24	7.3	1.8	0.4	0.2	0.7
27	23	6.6	1.8	0.5	0.2	0.6
28	21	6.2	1.8	0.6	0.3	0.6
29	18	5.6	1.8	0.8	0.4	0.6
30	14	5.3	1.6	0.8	0.4	0.6
31	---	5.3	---	0.7	0.4	---
Mean	40	9.9	2.7	0.9	0.4	0.6
Runoff acre-feet	2,416	612	162	54	23	37

Total = 3,304 acre-feet

TABLE B-13

DAILY MEAN DISCHARGE OF LITTLE TRUCKEE DITCH AT HEAD

May 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		No Record	63	25	3.2	1.2
2		10	61	25	3.0	1.2
3		20	54	23	2.7	1.2
4		20	56	21	2.4	1.2
5		20	58	20	2.2	1.2
6		20	56	18.9	2.0	1.2
7		20	56	18.0	2.0	1.2
8		15	55	16.8	2.0	1.2
9		20	54	14.8	2.0	1.2
10		40	54	13.0	1.8	1.2
11		41	54	11.5	1.8	1.2
12		43	54	10.5	1.8	1.2
13		43	56	9.8	1.7	1.2
14		45	56	9.2	1.6	1.2
15		47	56	8.6	1.5	1.2
16	No Record	49	57	7.9	1.5	1.2
17		50	57	7.1	1.5	1.2
18		53	54	6.5	1.5	1.3
19		54	54	5.9	1.5	1.3
20		55	56	5.1	1.3	1.3
21		58	55	4.9	1.3	1.3
22		58	52	4.2	1.5	1.3
23		52	49	4.1	1.5	1.3
24		48	49	3.9	1.5	1.3
25		48	47	3.9	1.5	1.3
26		48	42	3.6	1.3	1.3
27		48	37	3.6	1.3	1.3
28		54	33	4.1	1.3	1.3
29		60	29	3.9	1.3	1.3
30		60	27	3.9	1.3	1.3
31		60	---	3.6	1.2	---
Mean		42	51	10.4	1.7	1.2
Runoff acre-feet		2,493	3,051	636	107	74

Total = 6,361 acre-feet

TABLE B-14

DAILY MEAN DISCHARGE OF MIDDLE FORK FEATHER RIVER NEAR PORTOLA

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	530	38	6.0	0.4	0.1	
2	463	35	5.9	0.4	0.1	
3	398	34	4.8	0.3	0.1	
4	357	44	4.4	0.3	0	
5	319	63	4.4	0.2	0	
6	293	44	3.8	0.2	0	
7	319	40	3.7	0.2	0	
8	277	41	3.1	0.2	0	
9	259	39	2.6	0.2	0	
10	256	31	2.5	0.1	0	
11	239	25	2.5	0.1	0	
12	212	22	2.3	0.1	0	
13	185	18	2.0	0.1	0	
14	152	18	1.7	0.1	0	
15	117	16	1.8	0.1	0	
16	49	14	1.8	0.1	0	
17	38	12	1.8	0.1	0	
18	62	11	1.6	0.1	0	
19	72	11	1.3	0.1	0	No flow
20	59	11	1.1	0	0	
21	57	12	1.0	0	0	
22	69	12	0.9	0	0	
23	88	11	0.8	0	0	
24	85	14	0.8	0	0	
25	80	17	0.6	0	0	
26	84	17	0.6	0	0	
27	77	14	0.6	0	0	
28	68	99	0.6	0.1	0	
29	52	9.2	0.5	0.1	0	
30	45	7.2	0.4	0.1	0	
31	45	6.7	---	0.1	0	
Mean	179	22	2.2	0.1	0.0	---
Runoff acre-feet	10,630	1,382	131	8.0	1.0	---

Total = 12,152 acre-feet

TABLE B-15

DAILY MEAN DISCHARGE OF NORTH FORK COTTONWOOD CREEK NEAR IGO

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	191	106	99	42	17.0	6.3
2	186	106	91	38	13.0	6.3
3	174	99	88	37	12.0	6.3
4	170	96	79	37	11.0	7.0
5	166	88	77	35	11.0	7.8
6	150	85	71	35	11.0	7.8
7	143	88	69	35	10.0	7.8
8	136	85	66	33	9.5	7.8
9	132	77	66	33	9.5	8.7
10	129	74	62	31	10.0	8.7
11	132	66	57	31	10.0	8.7
12	125	62	55	30	10.0	7.8
13	109	59	52	30	10.0	7.8
14	99	55	50	30	9.5	7.8
15	99	55	48	28	9.5	7.8
16	96	74	46	28	8.7	8.7
17	93	77	46	28	8.7	10.0
18	93	74	46	27	15.0	9.5
19	93	74	44	33	17.0	9.5
20	88	71	37	30	8.7	13.0
21	57	71	37	28	7.0	19.0
22	57	71	35	28	5.6	17.0
23	62	230	33	28	5.6	16.0
24	57	296	31	25	5.6	9.5
25	62	364	31	21	5.6	10.0
26	62	347	33	17.0	5.6	11.0
27	366	286	31	16.0	5.6	12.0
28	158	226	33	13.0	4.9	11.0
29	119	125	40	13.0	4.9	9.5
30	106	115	42	15.0	4.9	9.5
31	---	106	---	18.0	5.6	---
Mean	124	123	53	28	9.1	9.7
Runoff acre-feet	7,359	7,553	3,164	1,732	559	574

Total = 20,940 acre-feet

TABLE B-16

DAILY MEAN DISCHARGE OF COOK AND BUTCHER DITCH

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1				9.0	3.0	2.7
2				9.0	3.0	3.2
3				9.0	3.0	2.9
4				8.0	2.9	4.4
5				8.0	2.9	4.5
6				8.0	3.0	3.2
7				7.0	3.0	3.2
8				6.0	2.4	2.3
9				3.3	2.7	2.3
10				3.0	3.0	2.9
11				4.4	2.5	2.3
12				4.4	2.3	3.0
13				3.6	2.9	3.0
14				6.0	2.7	2.5
15				6.0	3.2	1.9
16	No Record	No Record	No Record	6.0	2.7	2.0
17				2.8	2.5	3.7
18				3.0	2.3	1.9
19				4.4	1.0	2.4
20				3.3	1.0	2.7
21				1.5	1.6	3.2
22			11.0	0.4	1.6	4.6
23			11.0	0.0	2.0	3.2
24			11.0	0.5	2.0	2.9
25			11.0	3.2	2.0	2.3
26			10.0	4.8	2.0	2.5
27			9.0	4.7	2.4	2.3
28			9.0	4.5	3.0	
29			9.0	3.0	2.3	
30			9.0	3.7	2.0	No Rec.
31			---	3.0	2.7	
Mean			10.0	4.6	2.4	2.9
Runoff acre-feet			178	284	150	154

Total = 766 acre-feet

TABLE B-17

DAILY MEAN DISCHARGE OF MILLVILLE DITCH

August 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1						3.2
2						3.6
3						4.1
4						3.9
5						3.6
6						3.3
7						3.0
8						3.0
9						3.0
10						3.0
11						3.0
12						3.0
13						3.0
14					No Record	3.0
15						3.0
16	No Record	No Record	No Record	No Record		3.0
17						3.0
18						3.0
19						3.0
20						3.0
21						3.0
22						2.7
23					2.9	2.7
24					2.9	2.7
25					2.9	2.7
26					2.9	2.7
27					2.9	2.7
28					2.9	
29					2.9	
30					3.0	No Rec.
31					3.2	
Mean					2.9	3.1
Runoff acre-feet					52	164

TOTAL = 216 acre-feet

TABLE B-18

DAILY MEAN DISCHARGE OF LITTLE COW CREEK NEAR INGOT

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			8.2	7.7	7.6	7.5
2			8.2	7.7	7.6	7.5
3			8.1	7.7	7.6	7.6
4			8.1	7.6	7.6	7.6
5			8.1	7.6	7.6	7.6
6			8.1	7.6	7.6	7.6
7			8.1	7.6	7.6	7.5
8			8.2	7.6	7.6	7.5
9			8.0	7.6	7.6	7.5
10			8.0	7.6	7.6	7.5
11			8.0	7.6	7.6	7.5
12			7.9	7.6	7.6	7.6
13			7.9	7.6	7.6	7.5
14			7.9	7.6	7.6	7.5
15			7.9	7.6	7.6	7.5
16	No Record	No Record	7.9	7.5	7.6	7.5
17			7.9	7.5	7.6	7.5
18			7.9	7.5	7.5	7.5
19			7.8	7.5	7.5	7.5
20			7.8	7.5	7.5	7.5
21			7.8	7.5	7.5	7.6
22			7.8	7.5	7.5	7.5
23			7.8	7.5	7.5	7.5
24			7.7	7.5	7.5	7.5
25			7.7	7.5	7.5	7.5
26			7.7	7.6	7.5	7.5
27			7.7	7.6	7.5	7.5
28			7.7	7.6	7.5	7.5
29			7.7	7.6	7.5	7.5
30			7.7	7.6	7.6	7.5
31			---	7.6	7.6	---
Mean			7.9	7.6	7.6	7.5
Runoff acre-feet			470	465	464	447

Total = 1,846 acre-feet

TABLE B-19

DAILY MEAN DISCHARGE OF NEW PINE CREEK
BELOW SCHROEDER'S

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		16.0	37	16.0	9.0	4.0
2		16.0	40	16.0	9.0	4.0
3		16.0	42	16.0	9.0	4.0
4		16.0	42	15.0	9.0	4.0
5		16.0	37	15.0	9.0	4.0
6	No Record	18.0	35	15.0	9.0	4.0
7		24	31	15.0	9.0	4.0
8		25	30	14.0	9.0	4.0
9		28	30	14.0	9.0	4.0
10		33	30	14.0	9.0	4.0
11		33	28	14.0	8.0	4.0
12		38	27	14.0	7.0	4.0
13	17.0	30	26	14.0	7.0	4.0
14	17.0	25	26	14.0	7.0	4.0
15	16.0	25	25	14.0	7.0	4.0
16	16.0	38	25	14.0	7.0	4.0
17	15.0	30	25	14.0	7.0	4.0
18	15.0	25	24	13.0	7.0	4.0
19	15.0	24	24	13.0	6.0	3.0
20	15.0	23	24	12.0	5.0	3.0
21	15.0	22	23	12.0	5.0	3.0
22	15.0	20	23	12.0	5.0	3.0
23	15.0	19.0	22	12.0	5.0	
24	15.0	18.0	21	9.0	4.0	
25	15.0	17.0	20	9.0	4.6	
26	15.0	18.0	19.0	9.0	4.0	No Record
27	15.0	20	18.0	9.0	4.0	
28	15.0	22	18.0	9.0	4.0	
29	15.0	26	17.0	9.0	4.0	
30	15.0	28	17.0	9.0	4.0	
31	---	35	---	9.0	4.0	
Mean	15.3	24.0	26.9	12.7	6.6	3.8
Runoff acre-feet	546	1,473	1,596	780	407	166

Total = 4,968 acre-feet

TABLE B-20

DAILY MEAN DISCHARGE OF COTTONWOOD CREEK
BELOW LARKIN GARDEN DITCH

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		3.0	8.0	1.0	0.2	0.1
2		4.0	8.0	1.0	0.2	0.1
3		6.0	9.0	1.0	0.2	0.1
4		6.0	9.0	0.8	0.2	0.1
5		7.0	8.0	0.8	0.2	0.1
6	No Record	7.5	8.0	0.6	0.2	0.1
7		8.0	8.0	0.6	0.1	0.1
8		8.5	7.0	0.6	0.1	0.1
9		9.0	6.0	0.5	0.1	0.1
10		10.0	6.0	0.5	0.1	0.1
11		11.0	5.0	0.5	0.1	0.1
12		11.0	5.0	0.5	0.1	0.1
13	4.5	10.0	4.0	0.4	0.1	0.1
14	4.5	10.0	4.0	0.4	0.1	0.1
15	4.0	9.5	4.0	0.4	0.1	0.1
16	4.0	9.5	4.0	0.4	0.1	0.1
17	4.0	8.0	3.8	0.4	0.1	0.1
18	4.0	6.0	3.5	0.4	0.1	0.1
19	3.5	6.0	3.0	0.3	0.1	0.1
20	3.5	6.0	3.0	0.3	0.1	0.1
21	3.6	6.0	2.6	0.3	0.1	0.1
22	4.0	5.0	2.5	0.2	0.1	0.1
23	3.6	5.0	2.3	0.2	0.1	
24	3.5	4.0	2.0	0.2	0.1	
25	3.3	4.0	2.0	0.2	0.1	
26	3.0	5.0	2.0	0.2	0.1	No Record
27	3.0	5.0	2.0	0.2	0.1	
28	3.0	5.0	2.0	0.2	0.1	
29	3.0	5.0	1.5	0.2	0.1	
30	3.0	6.0	1.5	0.2	0.1	
31	---	7.0	---	0.2	0.1	
Mean	3.6	6.9	4.6	0.4	0.1	0.1
Runoff acre-feet	129	422	271	27	7.3	4.4

Total = 861 acre-feet

TABLE B-21

DAILY MEAN DISCHARGE OF DAVIS CREEK
AT OLD FISH WHEEL

May 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			22	9.0	4.0	4.0
2			23	8.0	4.0	4.0
3			24	8.0	4.0	4.0
4			24	8.0	4.0	4.0
5		No Record	22	8.0	4.0	4.0
6			21	8.0	4.0	4.0
7			20	8.0	4.0	4.0
8			20	8.0	4.0	4.0
9			18.0	8.0	4.0	4.0
10			17.0	8.0	4.0	4.0
11		23	16.0	8.0	4.0	4.0
12		23	16.0	8.0	4.0	4.0
13		22	16.0	8.0	4.0	4.0
14		21	15.0	8.0	4.0	4.0
15		22	15.0	8.0	4.0	4.0
16	No Record	22	15.0	7.0	4.0	4.0
17		20	14.0	7.0	4.0	4.0
18		18.0	14.0	6.0	4.0	4.0
19		17.0	13.0	6.0	4.0	4.0
20		17.0	13.0	6.0	4.0	4.0
21		17.0	13.0	6.0	4.0	4.0
22		16.0	12.0	6.0	4.0	4.0
23		15.0	11.0	5.0	4.0	
24		14.0	10.0	5.0	4.0	
25		14.0	10.0	5.0	4.0	
26		15.0	9.0	5.0	4.0	No Record
27		16.0	9.0	5.0	4.0	
28		17.0	9.0	4.0	4.0	
29		18.0	9.0	4.0	4.0	
30		19.0	9.0	5.0	4.0	
31		20	---	5.0	4.0	
Mean		18.4	15.3	6.7	4.0	4.0
Runoff acre-feet		764	909	412	246	174

Total - 2,505 acre-feet

TABLE B-22

DAILY MEAN DISCHARGE OF LINVILLE CREEK
AT OLD POWER HOUSE

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		2.5	2.0	2.6	2.4	2.5
2		2.5	2.0	2.6	2.4	2.5
3		2.5	2.0	2.6	2.4	2.5
4		2.5	2.0	2.6	2.4	2.5
5		2.5	2.0	2.6	2.4	2.5
6		2.5	2.5	2.6	2.4	2.5
7		2.5	2.5	2.6	2.4	2.5
8		2.5	2.5	2.6	2.4	2.5
9		2.5	2.5	2.6	2.4	2.5
10	No Record	2.5	2.5	2.6	2.4	2.5
11		2.5	2.5	2.6	2.4	2.5
12		2.5	2.5	2.5	2.4	2.5
13		2.5	2.5	2.5	2.4	
14		2.5	2.5	2.5	2.4	
15		2.5	2.5	2.5	2.4	
16		2.5	2.5	2.5	2.4	
17		2.5	2.5	2.5	2.4	
18		2.5	2.5	2.5	2.4	
19		2.5	2.5	2.5	2.4	
20	2.0	2.5	2.3	2.5	2.4	
21	2.0	2.5	2.3	2.5	2.5	
22	2.0	2.5	2.3	2.5	2.5	
23	2.0	2.3	2.3	2.5	2.5	No Record
24	2.0	2.3	2.3	2.5	2.5	
25	2.0	2.3	2.3	2.5	2.5	
26	2.5	2.3	2.3	2.5	2.5	
27	2.5	2.3	2.6	2.5	2.5	
28	2.5	2.3	2.6	2.5	2.5	
29	2.5	2.3	2.6	2.5	2.5	
30	2.5	2.3	2.6	2.5	2.5	
31	---	2.0	---	2.5	2.5	
Mean	2.2	2.4	2.4	2.5	2.4	2.5
Runoff acre-feet	48	149	142	156	149	59

Total = 702 acre-feet

TABLE B-23

DAILY MEAN DISCHARGE OF LINVILLE CREEK
ABOVE RENNER HOUSE DITCH

May 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			0.7	0.7	0.7	0.7
2			0.7	0.7	0.7	0.7
3		No Record	0.7	0.9	0.7	0.7
4			0.7	0.9	0.7	0.7
5			0.7	0.9	0.7	0.7
6			0.7	0.9	0.7	0.7
7			0.7	1.9	0.7	0.9
8			0.7	1.0	0.7	0.9
9		1.6	0.7	1.0	0.7	0.9
10		1.6	0.9	1.1	0.7	0.9
11		1.5	0.9	1.3	0.7	0.9
12		1.4	0.8	1.6	0.7	
13		1.4	0.8	1.3	0.7	
14		1.9	0.7	1.5	0.7	
15		1.9	0.7	1.1	0.7	
16	No Record	0.8	0.7	0.7	0.7	
17		0.8	0.7	0.9	0.7	
18		0.8	0.7	0.9	0.7	
19		0.8	0.7	0.9	0.7	
20		1.5	0.7	0.8	0.7	
21		1.2	0.7	0.8	0.7	No Record
22		0.9	0.7	0.7	0.7	
23		1.5	0.7	0.7	0.7	
24		1.5	0.7	0.7	0.7	
25		0.9	0.7	0.7	0.7	
26		0.9	0.7	0.7	0.7	
27		0.8	0.7	0.7	0.7	
28		0.7	0.7	0.7	0.7	
29		0.7	0.7	0.7	0.7	
30		0.7	0.7	0.7	0.7	
31		0.7	---	0.7	0.7	
Mean		1.2	0.7	0.9	0.7	0.8
Runoff acre-feet		32	43	57	43	17.2

Total = 212 acre-feet

TABLE B-24

DAILY MEAN DISCHARGE OF FRANKLIN CREEK
ABOVE DIVERSIONS

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		6.1	5.3	2.4	2.0	1.8
2		6.1	5.3	2.4	2.0	1.8
3		6.7	5.3	2.4	1.9	1.8
4		6.9	5.1	2.4	1.9	1.8
5		7.5	5.0	2.4	1.9	1.8
6		7.5	4.6	2.2	1.9	1.8
7		10.0	4.6	2.2	1.9	1.8
8		11.0	4.5	2.0	1.9	1.8
9	No Record	11.8	3.9	2.0	1.9	1.8
10		12.2	3.3	2.0	1.9	1.8
11		12.7	3.3	2.0	1.9	1.8
12		12.3	3.3	2.0	1.9	1.8
13		11.2	3.3	2.0	1.9	
14		10.9	3.3	2.0	1.9	
15		10.2	3.3	2.0	1.9	
16		8.8	3.3	2.0	1.9	
17		8.5	3.2	2.0	1.9	
18	5.1	8.2	3.0	2.0	1.9	
19	5.1	7.7	3.0	2.0	1.9	
20	5.4	7.5	3.0	2.0	1.9	
21	5.6	7.5	2.9	2.0	1.9	
22	5.5	7.2	2.8	2.0	1.9	
23	5.3	6.0	2.8	2.0	1.9	No Record
24	5.1	5.6	2.8	2.0	1.9	
25	5.1	5.6	2.8	2.0	1.9	
26	4.9	5.6	2.8	2.0	1.8	
27	4.6	5.4	2.6	2.0	1.8	
28	4.6	5.3	2.4	2.0	1.8	
29	4.6	5.3	2.4	2.0	1.8	
30	5.3	5.3	2.4	2.0	1.8	
31	---	5.3	---	2.0	1.8	
Mean	5.1	8.0	3.5	2.1	1.9	1.8
Runoff acre-feet	131	491	209	128	116	43

Total = 1,118 acre-feet

TABLE B-25

DAILY MEAN DISCHARGE OF JOSEPH CREEK
BELOW COUCH CREEK

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		4.4	6.4	3.5	1.5	1.5
2		5.5	7.0	3.5	1.5	1.4
3		6.4	7.0	3.3	1.5	1.4
4		8.5	6.5	3.2	1.5	1.3
5		8.2	6.0	3.0	1.5	1.2
6		8.2	6.0	3.0	1.5	1.2
7		16.0	5.5	3.0	1.5	1.2
8		14.0	5.2	2.5	1.5	1.2
9	No Record	10.2	4.8	2.0	1.5	1.2
10		10.0	4.4	1.8	1.5	1.2
11		9.0	4.2	1.8	1.5	1.2
12		9.0	4.2	1.8	1.5	1.2
13		8.0	4.0	1.8	1.5	
14		6.4	4.0	2.0	1.5	
15		6.0	4.0	2.0	1.5	
16		6.0	4.0	2.0	1.5	
17		5.5	4.0	2.0	1.5	
18	6.0	5.2	4.0	2.0	1.5	
19	4.5	5.0	4.0	2.0	1.5	
20	4.5	5.0	4.0	2.0	1.5	
21	5.0	5.5	3.6	2.0	1.5	
22	5.0	5.2	3.4	2.0	1.5	
23	4.2	5.0	3.1	2.0	1.5	No Record
24	4.0	5.2	3.1	2.0	1.5	
25	4.0	5.4	3.7	2.0	1.5	
26	4.0	5.2	4.0	1.8	1.5	
27	4.2	4.5	4.0	1.8	1.5	
28	4.0	4.2	4.0	1.8	1.5	
29	3.6	4.2	3.8	1.8	1.5	
30	3.4	5.0	3.5	1.8	1.5	
31	---	6.0	---	1.8	1.5	
Mean	4.3	6.8	4.5	2.2	1.5	1.3
Runoff acre-feet	111	419	268	137	92	30

Total = 1,057 acre-feet

TABLE B-26

DAILY MEAN DISCHARGE OF THOMS CREEK
AT CEDARVILLE-ALTURAS HIGHWAY

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		14.0	11.0	2.4	1.2	
2		19.0	10.0	2.2	1.0	
3		18.0	9.0	2.0	1.0	
4		21	8.0	1.9	1.0	
5		24	6.5	1.8	0.8	
6		25	6.2	1.8	0.6	
7		25	6.2	1.6	0.5	
8		25	6.2	1.5	0.3	
9		25	6.0	1.3		
10		24	5.8	1.5		
11	No Record	23	4.5	1.5		Dry at Recorder
12		20	4.4	1.3		
13		19.0	4.4	1.2		
14		18.0	4.0	1.0		
15		17.0	4.4	1.0		
16		16.0	4.4	1.0		
17		16.0	4.0	1.0		
18		16.0	4.0	1.0		
19		15.0	4.0	1.0		
20		15.0	4.0	1.0		
21	15.0	14.0	4.0	1.0	Dry at Recorder	
22	14.0	14.0	4.0	0.8		
23	13.0	14.0	4.0	0.7		
24	12.0	13.0	3.5	0.7		
25	11.0	13.0	3.0	0.7		
26	11.0	13.0	3.0	0.5		
27	10.0	12.0	3.0	0.5		
28	10.0	12.0	2.8	0.5		
29	9.0	11.0	2.6	0.5		
30	9.0	11.0	2.6	0.2		
31	---	11.0	---	0.5		
Mean	11.4	17.2	5.0	1.1	.8	0
Runoff acre-feet	226	1,055	296	70	12.7	0

Total = 1,660 acre-feet

TABLE B-27

DAILY MEAN DISCHARGE OF GLEASON CREEK
NEAR JONES RANCH

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		1.0	0.4			
2		1.1	0.4			
3		1.1	0.4			
4		1.5	0.3			
5		2.6	0.3			
6		1.5	0.2			
7		1.1	0.2			
8		1.0	0.2			
9		1.0	0.2			
10	No Record	0.8	0.2			
11		0.8	0.2			
12		0.8	0.1			
13		0.8	0.1			
14		0.8	0.1			
15		0.8	0.1			
16		0.8	0.1	Dry at Recorder	Dry at Recorder	Dry at Recorder
17		0.8				
18		0.8				
19		0.8				
20		0.8				
21	1.0	0.8				
22	1.0	0.8				
23	1.0	0.8				
24	1.0	0.8				
25	1.0	0.8				
26	1.0	0.8	Dry at Recorder			
27	1.0	0.8				
28	1.0	0.7				
29	1.0	0.6				
30	1.0	0.6				
31	---	0.6				
Mean	1.0	0.9	0.2			
Runoff acre-feet	19.8	57	6.9			

Total = 84 acre-feet

TABLE B-28

DAILY MEAN DISCHARGE OF PARKER CREEK
AT FOGARTY RANCH

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1				14.0	19.0	4.0
2				14.0	14.0	4.0
3			No Record	14.0	12.0	4.0
4				14.0	11.0	4.0
5				16.0	10.0	3.0
6				14.0	8.0	3.0
7				12.0	6.0	3.0
8				12.0	5.0	3.0
9			25	12.0	4.0	
10			25	11.0	4.0	
11			24	11.0	3.5	
12			23	11.0	4.0	
13			23	10.0	5.0	
14			21	10.0	6.0	
15			21	9.0	7.0	
16	No Record	No Record	21	8.0	8.0	
17			20	7.0	8.0	
18			18.0	6.0	9.0	
19			18.0	5.0	9.0	No Record
20			18.0	4.0	8.0	
21			16.0	4.0	4.5	
22			14.0	4.0	4.5	
23			12.0	4.0	9.0	
24			11.0	4.0	10.0	
25			10.0	4.0	10.0	
26			9.0	4.0	10.0	
27			8.0	4.0	10.0	
28			7.0	4.0	9.0	
29			6.0	4.0	9.0	
30			14.0	12.0	4.0	
31			---	22	4.0	
Mean			16.5	9.2	7.9	3.5
Runoff acre-feet			721	562	484	55

Total = 1,822 acre-feet

TABLE B-29

DAILY MEAN DISCHARGE OF SHIELDS CREEK
ABOVE DIVERSIONS

May 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		2.8	3.8	2.9	2.3	2.0
2		2.8	3.7	2.9	2.3	2.0
3		2.8	3.6	2.8	2.2	2.0
4		2.8	3.5	2.8	2.2	2.0
5		2.9	3.4	2.8	2.2	2.0
6		3.0	3.3	2.7	2.2	1.9
7		3.2	3.3	2.7	2.1	1.9
8		3.3	3.2	2.7	2.1	1.9
9		3.5	3.1	2.7	2.1	
10		3.7	3.1	2.7	2.0	
11		3.8	3.1	2.7	2.0	
12		4.1	3.1	2.6	2.0	
13		4.4	3.1	2.6	2.0	
14		4.7	3.1	2.6	2.0	
15		5.0	3.1	2.6	2.0	
16	No Record	5.3	3.1	2.6	2.0	
17		5.7	3.1	2.6	2.0	
18		5.3	3.1	2.6	2.0	
19		5.0	3.1	2.5	2.0	
20		4.7	3.1	2.5	2.0	
21		4.4	3.1	2.5	2.0	No Record
22		4.1	3.1	2.5	2.0	
23		3.7	3.1	2.5	2.0	
24		3.7	3.1	2.5	2.0	
25			3.1	2.4	2.0	
26		3.7	3.0	2.4	2.0	
27		3.8	3.0	2.4	2.0	
28		3.8	3.0	2.4	2.0	
29		3.8	2.9	2.4	2.0	
30		3.9	2.9	2.4	2.0	
31		3.9	---	2.3	2.0	
Mean		3.9	3.2	2.6	2.0	2.0
Runoff acre-feet		240	189	159	126	31

Total = 745 acre-feet

TABLE B-30

DAILY MEAN DISCHARGE OF PARKER CREEK
ABOVE HIGHWAY 395

May 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			2.0	2.0	0.5	0.2
2			2.0	1.0	0.5	0.2
3			2.0	1.0	0.5	0.2
4			2.0	1.0	0.5	0.2
5			4.0	1.0	0.5	0.2
6			8.0	1.0	0.5	0.2
7			10.0	1.0	0.5	0.2
8			11.0	1.0	0.5	0.2
9			10.0	1.0	0.5	0.2
10			5.0	1.0	0.5	0.2
11			6.0	1.0	0.5	0.2
12			5.0	1.0	0.4	0.1
13			4.0	1.0	0.4	0.1
14			4.0	1.0	0.4	0.1
15			4.0	1.0	0.4	0.1
16	No Record	No Record	4.0	0.8	0.4	0.1
17			4.0	0.5	0.4	0.1
18			4.0	0.5	0.4	0.1
19			3.0	0.5	0.3	0.1
20			3.0	0.5	0.3	0.1
21			4.0	0.5	0.3	0.1
22			4.0	0.5	0.3	0.1
23			3.0	0.5	0.3	
24			2.0	0.5	0.3	
25			2.0	0.5	0.3	
26			2.0	0.5	0.3	No Record
27		8.0	1.0	0.5	0.3	
28		4.0	0.0	0.5	0.3	
29		3.0	2.0	0.5	0.2	
30		2.0	2.0	0.5	0.2	
31		2.0		0.5	0.2	
					0.2	
Mean		3.8	4.0	0.8	0.4	0.2
Runoff acre-feet		38	236	48	24	6.5

Total = 352 acre-feet

TABLE B-31

DAILY MEAN DISCHARGE OF NORTH FORK PIT
BELOW THOMS CREEK

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		20	21	2.5		
2		30	20	2.0		
3		40	19.0	1.5		
4		50	18.0	1.0		
5	No Record	50	17.0	0.5		
6		50	16.0			
7		51	15.0			
8		52	14.0			
9		53	13.0			
10		54	12.0			
11		54	11.0			
12		50	10.0			
13	38	46	9.0			
14	38	42	8.0			
15	36	38	7.9			
16	34	34	7.8			
17	32	30	7.7			
18	30	26	7.5			
19	28	24	7.4	No Record	No Record	No Record
20	26	23	7.4			
21	26	29	7.2			
22	26	31	7.0			
23	26	28	6.5			
24	26	30	6.0			
25	26	31	5.5			
26	26	31	5.0			
27	26	27	4.5			
28	24	26	4.0			
29	22	25	3.5			
30	20	23	3.0			
31	--	22	---			
Mean	28.3	34	9.4	1.5		
Runoff acre-feet	1,010	2,119	580	14.8		

Total = 3,724 acre-feet

TABLE B-32

DAILY MEAN DISCHARGE OF PARKER CREEK AND NORTH FORK PIT RIVER

May 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			23	7.0	0.5	0.2
2			22	5.0	0.5	0.2
3			21	4.0	0.5	0.2
4			20	3.0	0.5	0.2
5			21	2.0	0.5	0.2
6			24	1.0	0.5	0.2
7			25	1.0	0.5	0.2
8			25	1.0	0.5	0.2
9			23	1.0	0.5	0.2
10			17.0	1.0	0.5	0.2
11			17.0	1.0	0.5	0.2
12			15.0	1.0	0.4	0.1
13			13.0	1.0	0.4	0.1
14			12.0	1.0	0.4	0.1
15			11.0	1.0	0.4	0.1
16	No Record	No Record	11.0	0.8	0.4	0.1
17			11.0	0.5	0.4	0.1
18			11.0	0.5	0.4	0.1
19			10.0	0.5	0.3	0.1
20			10.0	0.5	0.3	0.1
21			11.0	0.5	0.3	0.1
22			11.0	0.5	0.3	
23			10.0	0.5	0.3	
24			8.0	0.5	0.3	
25			8.0	0.5	0.3	
26			8.0	0.5	0.3	No Record
27		35	7.0	0.5	0.3	
28		30	6.0	0.5	0.3	
29		28	8.0	0.5	0.2	
30		25	8.0	0.5	0.2	
31		24	---	0.5	0.2	
					0.2	
Mean		28.4	14.2	1.3	0.4	0.2
Runoff acre-feet		281	845	78	24	6.3

Total = 1,234 acre-feet

TABLE B-33

DAILY MEAN DISCHARGE OF NORTH FORK PIT RIVER NEAR ALTURAS

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	63	7.0	14.0	1.8	0.4	0.8
2	88	30	7.7	1.5	.6	.6
3	114	30	.8	1.5	.6	.8
4	122	133	1.2	1.8	.6	.6
5	122	114	1.0	2.1	1.0	.5
6	116	87	1.5	2.1	.5	.5
7	175	232	2.1	2.1	.6	.5
8	132	186	3.7	2.1	1.5	.5
9	116	137	3.7	2.1	1.8	.4
10	84	101	2.1	2.1	.5	.4
11	82	65	1.5	1.8	.4	.3
12	69	83	1.5	1.8	.4	.3
13	52	65	1.5	1.8	.4	.3
14	55	44	1.5	2.1	.4	.3
15	38	45	1.5	1.5	.4	.3
16	20	42	1.2	1.8	.4	.3
17	27	38	1.2	1.5	.4	.4
18	30	33	1.2	1.5	.4	.4
19	27	31	1.5	1.8	.4	.5
20	17.0	46	1.0	1.8	.4	.6
21	7.5	40	1.0	1.8	.4	.4
22	20	44	1.0	1.0	.4	.5
23	18.0	40	.6	1.0	.5	.5
24	25	34	1.0	1.2	.6	.5
25	27	36	1.0	1.5	.6	.5
26	19.0	36	1.0	1.5	.6	.6
27	23	35	1.0	1.2	.6	.6
28	25	14.0	1.0	.8	.6	.6
29	19.0	21	1.2	1.0	.6	.6
30	11.0	8.4	1.5	.8	.6	.6
31	---	9.1	---	.6	.6	---
Mean	58	60	2.1	1.6	0.6	0.5
Runoff acre-feet	3,460	3,700	122	97	36	29

Total = 7,444 acre-feet

TABLE B-34

DAILY MEAN DISCHARGE OF RALPH EASTLICK DITCH

July 1 to August 31, 1960

In second-feet

Day	July	August	September
1		0.8	
2		0.5	
3		0.4	
4		0.4	
5	No Record		
6		0.4	
7		0.4	
8		2.5	
9		3.5	
10		3.5	
11	4.5	3.5	
12	4.5	3.4	
13	4.4	3.3	
14	4.2	3.3	
15	4.1	1.2	
16	3.7		
17	3.2		
18	3.2		
19	1.9		
20	1.2		
21	1.2	Diversion Closed	
22	1.2		
23	1.2		
24	1.2		
25	1.1		
26	0.8		
27	0.5		
28	0.5		
29	0.5		
30	0.4		
31	0.7		
Mean	2.1	1.8	0
Runoff acre-feet	88	54	0

Total = 142 acre-feet

TABLE B-35

DAILY MEAN DISCHARGE OF SHACKLEFORD DITCH

July 1 to September 30, 1960

In second-feet

Day	July	August	September
1		8.9	8.2
2		9.1	7.8
3		9.1	7.4
4		8.9	6.7
5		8.7	6.7
6	No Record	8.7	7.2
7		8.7	7.6
8		8.2	7.4
9		8.4	7.4
10		8.7	7.4
11	4.1	8.7	7.4
12	4.1	8.4	6.7
13	4.1	8.0	5.9
14	4.1	8.0	5.4
15	4.1	7.8	4.1
16	5.6	8.2	3.6
17	9.1	8.2	3.6
18	9.1	8.2	3.6
19	7.2	8.2	2.9
20	7.2	8.2	2.5
21	7.1	8.2	2.5
22	7.1	8.7	2.5
23	7.0	9.1	2.5
24	7.0	9.1	2.5
25	7.0	9.1	1.5
26	7.0	9.1	0.6
27	7.0	9.1	
28	7.0	9.1	
29	7.0	8.7	No Record
30	7.1	8.7	
31	7.1	8.7	
Mean	6.5	8.6	5.1
Runoff acre-feet	269	528	260

Total = 1,057 acre-feet

TABLE B-36

DAILY MEAN DISCHARGE OF HOWARD JONES DITCH

July 1 to August 31, 1960

In second-feet

Day	July	August	September
1		0.2	
2			
3			
4			
5			
6	No Record		
7			
8			
9			
10			
11	4.5		
12	5.6		
13	4.1		
14	4.5		
15	8.0		
16	8.7	Diversion Closed	
17	6.2		
18	3.9		
19	2.5		
20	2.9		
21	3.4		
22	3.4		
23	2.9		
24	2.6		
25	2.4		
26	1.5		
27	0.9		
28	0.9		
29	0.4		
30	0.1		
31	0.8		
Mean	3.3	0	0
Runoff acre-feet	139	0	0

Total - 139 acre-feet

TABLE B-37

DAILY MEAN DISCHARGE AT CAMP DITCH

July 1 to September 30, 1960

In second-feet

Day	July	August	September
1	No Record	3.6	1.9
2		2.3	2.3
3		1.9	2.6
4		2.5	3.2
5		2.7	3.1
6		2.3	2.6
7		2.3	1.9
8		2.3	1.8
9		1.7	1.7
10		1.6	1.5
11	2.5	1.4	1.3
12	1.8	1.7	1.5
13	1.5	2.1	1.2
14	1.3	2.0	0.8
15	1.1	2.5	1.4
16	2.3	2.1	1.9
17	2.9	1.9	1.9
18	2.6	1.9	1.5
19	3.1	1.8	1.8
20	4.0	1.5	2.3
21	3.5	1.3	2.3
22	3.2	1.9	2.3
23	3.4	2.6	2.3
24	2.7	2.5	2.3
25	2.6	2.2	2.8
26	3.2	1.9	3.0
27	3.8	1.7	No Record
28	3.4	1.4	
29	4.1	1.1	
30	3.7	1.4	
31	5.6	1.2	
Mean	3.0	2.0	2.0
Runoff acre-feet	123	121	105

Total = 349 acre-feet

TABLE B-38

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

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	No Record	22	54	6.8	3.7	3.6
2		24	61	6.4	3.7	3.6
3		28	56	6.4	3.7	3.6
4		27	51	6.3	3.7	3.6
5	90	26	44	6.0	3.7	3.6
6	95	30	38	5.0	3.7	3.6
7	95	45	33	4.5	3.6	3.6
8	90	44	29	4.3	3.6	3.6
9	85	52	26	4.2	3.5	3.6
10	80	90	24	4.2	3.5	3.6
11	55	95	22	4.1	3.5	3.6
12	45	90	21	3.9	3.5	3.6
13	42	55	21	3.8	3.5	3.6
14	43	48	18.3	3.9	3.5	3.6
15	36	47	16.0	3.9	3.5	3.6
16	34	43	15.0	3.8	3.7	3.6
17	32	39	13.6	3.8	3.7	3.6
18	29	32	13.0	3.8	3.7	3.6
19	29	30	12.3	3.8	3.6	3.5
20	31	32	11.4	3.7	3.5	3.6
21	31	29	8.8	3.7	3.5	3.6
22	28	26	8.5	3.7	3.6	3.6
23	27	21	7.9	3.7	3.7	3.6
24	25	22	7.7	3.7	3.7	3.5
25	24	21	7.5	3.7	3.7	3.5
26	21	28	7.5	3.7	3.7	3.5
27	19.0	30	7.2	3.6	3.7	
28	18.3	30	7.2	3.6	3.7	
29	18.3	34	6.8	3.7	3.6	No Record
30	19.5	37	6.8	3.7	3.6	
31	---	47	---	3.7	3.6	
Mean	44	39	22[illegible]	4.3	3.6	3.6
Runoff acre-feet	2,261	2,424	1,298	264	222	184

Total = 6,653 acre-feet

TABLE B-39

DAILY MEAN DISCHARGE OF SHASTA RIVER AT EDGEWOOD BRIDGE

October 1, 1959 to September 30, 1960

In second-feet

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	Sept.
1	20	23	26	28	310	33	45	25	35	10.0	7.8	7.5
2	20	23	26	28	110	32	45	30	45	9.6	7.0	7.5
3	21	23	26	28	84	36	46	28	48	9.6	7.0	7.5
4	20	23	26	28	75	44	57	30	47	9.6	7.0	7.5
5	18.5	23	26	28	88	55	70	25	45	8.8	7.0	7.5
6	22	23	26	28	70	64	73	22	40	8.5	7.2	7.5
7	22	23	26	29	350	160	69	27	36	8.5	7.5	7.5
8	22	23	26	29	600	100	48	28	30	8.1	7.8	7.5
9	22	23	26	29	325	75	42	27	26	8.1	7.5	7.5
10	22	24	26	29	110	64	39	32	24	82	7.5	7.5
11	22	24	26	29	82	61	34	39	24	7.9	7.5	8.0
12	22	24	26	29	69	63	30	41	25	8.1	7.5	8.0
13	22	24	26	29	67	62	27	32	27	8.1	7.5	8.0
14	22	24	26	30	60	54	27	31	28	8.1	7.5	8.0
15	22	24	26	30	55	46	25	31	30	8.0	7.5	8.0
16	22	24	26	30	52	37	24	29	30	8.2	7.5	8.5
17	22	24	26	30	51	30	24	26	29	8.1	7.5	8.5
18	22	24	26	31	50	31	23	22	25	8.1	7.5	8.5
19	22	24	26	31	50	33	23	21	23	8.1	7.5	8.5
20	22	25	27	31	50	40	21	24	21	8.1	7.5	8.5
21	22	25	27	39	50	50	21	27	19.0	8.2	7.5	9.0
22	22	25	27	44	44	61	22	28	16.3	8.1	7.5	9.0
23	22	25	27	48	39	57	25	39	14.8	8.1	7.5	9.0
24	22	25	27	52	36	58	23	53	14.4	8.1	7.5	9.0
25	23	25	28	72	36	59	23	44	13.9	7.9	7.5	9.0
26	23	25	28	72	35	60	22	52	13.4	8.1	7.5	9.5
27	23	25	28	57	34	72	33	45	12.8	8.1	7.5	9.5
28	23	25	28	62	34	69	30	36	11.0	7.9	7.5	9.5
29	23	25	28	64	33	51	23	34	9.6	7.8	7.5	9.5
30	23	26	28	65	--	65	21	32	9.5	7.9	7.5	9.5
31	23	--	28	53	--	50	--	32	---	8.1	7.5	---
Mean	22	24	27	39	105	57	35	32	26	8.3	7.4	8.3
Runoff ac-ft	1,343	1,432	1,634	2,400	6,037	3,509	2,049	1,964	1,530	511	457	495

Total = 23,361 acre-feet

TABLE B-40

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

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1				20	25	21
2				19.7	24	22
3				17.4	26	21
4				19.2	23	27
5				29	25	60
6			No Record	19.7	29	44
7				15.7	32	27
8				18.7	28	21
9				17.8	27	21
10				18.7	23	19.6
11				20	24	20
12			18.0	20	32	18.7
13			18.0	22	28	24
14			21	18.7	26	26
15			19.0	19.2	23	29
16	No Record	No Record	16.0	19.7	18.3	30
17			18.0	22	19.7	25
18			20	25	22	29
19			19.0	22	26	100
20			19.0	18.3	27	95
21			20	17.4	26	70
22			21	18.3	27	80
23			24	22	26	75
24			26	20	25	85
25			28	20	23	160
26			25	22	19.2	180
27			22	22	21	160
28			23	19.7	22	120
29			25	25	22	120
30			22	26	22	120
31			---	27	22	---
Mean			21	21	25	62
Runoff acre-feet			800	1,272	1,511	3,663

Total = 7,246 acre-feet

TABLE B-41

DAILY MEAN DISCHARGE OF LITTLE SHASTA RIVER NEAR MONTAGUE

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	54	18.0	14.0	4.8	2.8	2.6
2	52	20	14.0	4.8	2.6	2.6
3	50	23	13.0	4.5	2.8	2.8
4	45	27	12.0	4.5	3.0	2.6
5	40	21	12.0	4.5	2.8	2.2
6	33	31	11.0	4.3	2.6	2.2
7	30	67	11.0	4.3	2.6	2.2
8	29	29	10.0	4.0	2.8	2.4
9	30	30	9.8	3.8	2.6	2.4
10	30	27	9.4	3.8	2.6	2.4
11	32	25	8.6	3.8	2.6	2.4
12	27	24	8.2	3.5	2.4	2.4
13	26	22	7.8	3.5	2.6	2.4
14	37	19.0	7.4	3.3	2.6	2.4
15	26	18.0	7.4	3.3	2.6	2.2
16	21	16.0	7.1	3.3	2.8	2.4
17	20	16.0	6.7	3.5	2.6	2.2
18	25	15.0	6.4	3.3	2.8	2.4
19	28	15.0	6.7	3.0	2.8	2.4
20	25	17.0	6.4	3.0	2.8	2.4
21	23	19.0	6.1	2.8	2.6	2.4
22	19.0	18.0	5.7	2.8	2.2	2.4
23	20	17.0	5.7	3.0	2.6	2.2
24	18.0	18.0	5.4	2.8	2.6	2.2
25	17.0	19.0	5.4	2.8	2.8	2.2
26	16.0	21	5.1	2.8	2.6	2.2
27	15.0	21	4.8	2.8	2.6	2.2
28	14.0	16.0	4.8	2.4	2.6	2.2
29	14.0	15.0	4.8	2.6	2.4	2.2
30	15.0	15.0	4.8	2.8	2.4	2.2
31	---	15.0	---	2.8	2.4	---
Mean	27	21	8.1	3.5	2.6	2.3
Runoff acre-feet	1,648	1,337	479	213	162	140

Total = 3,979 acre-feet

TABLE B-42

DAILY MEAN DISCHARGE OF EDSON FOULKE YREKA DITCH
AT SHASTA RIVER

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	0	24	35	19.1	4.5	1.6
2	0	25	37	16.9	4.1	1.6
3	0	27	37	15.5	4.1	1.6
4	16.9	26	37	14.0	4.1	1.6
5	0	24	36	11.9	4.1	1.7
6	0	26	35	10.8	4.3	1.7
7	11.4	31	33	8.0	4.1	1.7
8	31	31	27	5.0	3.3	1.7
9	30	33	26	8.4	2.5	1.7
10	28	33	25	7.1	2.2	2.1
11	26	30	25	6.7	1.8	1.9
12	23	29	25	7.7	1.8	1.9
13	22	29	27	8.4	1.8	1.9
14	22	28	30	6.2	1.8	1.9
15	19.4	27	29	5.6	1.7	1.8
16	18.4	29	29	5.1	1.8	1.8
17	18.1	29	28	4.9	1.8	1.9
18	17.5	28	27	4.5	1.8	1.9
19	17.2	27	26	4.5	1.8	1.8
20	17.5	29	25	4.5	1.8	1.9
21	17.5	28	24	4.5	1.8	2.1
22	19.1	27	24	4.3	1.7	2.1
23	22	30	22	4.3	1.8	2.1
24	19.1	31	22	4.3	1.8	2.1
25	20	32	22	4.1	1.8	2.1
26	19.4	35	22	4.1	1.7	1.9
27	29	33	21	4.1	1.7	1.8
28	21	32	20	4.1	1.7	
29	19.1	31	19.4	4.1	1.7	No Record
30	20	32	19.1	5.0	1.6	
31	---	33	---	4.9	1.6	
Mean	17.5	29	27	7.2	2.3	1.8
Runoff acre-feet	1,038	1,800	1,612	441	143	99

Total = 5,133 acre-feet

TABLE B-43

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

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	No Record	36	52	21	5.0	2.3
2		40	55	17.8	5.0	2.3
3		41	54	16.0	5.0	2.3
4	22	42	52	14.5	4.7	2.3
5	18.4	40	50	12.2	4.5	2.5
6	22	42	48	11.0	4.5	2.6
7	26	55	45	8.3	4.5	2.6
8	45	56	39	5.9	4.3	2.8
9	55	56	36	6.8	3.7	2.8
10	53	57	34	7.7	3.0	2.8
11	47	57	34	6.5	2.8	2.8
12	38	56	33	7.0	2.8	2.8
13	35	50	33	6.3	2.8	2.8
14	36	46	34	6.2	2.8	2.8
15	29	45	34	5.5	2.8	2.8
16	27	45	33	5.4	2.6	2.8
17	26	45	32	5.2	2.6	2.8
18	26	41	29	5.2	2.6	2.8
19	27	38	28	5.4	2.6	2.8
20	28	41	27	5.2	2.6	2.8
21	28	39	26	5.2	2.6	2.8
22	30	37	25	5.0	2.6	2.8
23	35	38	24	5.0	2.6	2.8
24	30	39	23	4.8	2.6	3.0
25	32	44	24	4.8	2.6	3.0
26	28	44	23	5.0	2.6	2.8
27	36	43	22	5.0	2.6	
28	29	45	21	4.8	2.6	No Record
29	27	46	20	4.8	2.6	
30	32	47	20	5.0	2.5	
31	---	48	---	5.0	2.3	
Mean	32	45	34	7.5	3.2	2.7
Runoff acre-feet	1,717	2,770	2,000	462	197	140

Total = 7,287 acre-feet

TABLE B-44

DAILY MEAN STORAGE IN DWINNELL RESERVOIR

October 1, 1959 to September 30, 1960 in acre-feet

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	8,550	7,950	8,900	10,100	12,000	18,100	20,900	19,200	15,800	11,100	5,850	2,400
2	8,500	7,950	9,000	10,200	12,600	18,200	20,900	19,100	15,800	10,900	5,700	2,250
3	8,450	8,000	9,050	10,200	12,900	18,200	21,000	19,000	15,800	10,700	5,550	2,150
4	8,450	8,000	9,050	10,200	13,000	18,200	21,100	18,900	15,700	10,500	5,400	2,100
5	8,400	8,050	9,100	10,200	13,200	18,300	21,200	18,800	15,600	10,300	5,300	2,050
6	8,350	8,100	9,100	10,300	13,300	18,400	21,300	18,700	15,500	10,100	5,150	2,000
7	8,300	8,150	9,150	10,300	13,800	18,600	21,400	18,600	15,400	10,000	5,000	1,950
8	8,250	8,200	9,150	10,300	15,100	19,000	21,500	18,500	15,200	9,800	4,900	1,950
9	8,250	8,200	9,200	10,400	16,100	19,100	21,500	18,400	15,100	9,600	4,800	1,900
10	8,200	8,250	9,250	10,400	16,500	19,200	21,500	18,300	15,000	9,400	4,700	1,900
11	8,200	8,300	9,250	10,500	16,800	19,400	21,600	18,200	14,800	9,200	4,550	1,850
12	8,150	8,350	9,300	10,600	16,900	19,500	21,600	18,000	14,600	8,950	4,400	1,800
13	8,150	8,350	9,350	10,600	17,000	19,600	21,500	17,800	14,400	8,700	4,300	1,800
14	8,150	8,400	9,400	10,600	17,200	19,700	21,500	17,700	14,300	8,450	4,200	1,800
15	8,150	8,450	9,450	10,700	17,300	19,800	21,300	17,600	14,100	8,250	4,050	1,750
16	8,150	8,500	9,500	10,700	17,400	19,900	21,200	17,400	13,900	8,000	3,900	1,700
17	8,150	8,500	9,500	10,700	17,400	19,900	21,200	17,200	13,700	7,800	3,850	1,700
18	8,100	8,550	9,550	10,800	17,500	19,900	21,100	17,000	13,500	7,750	3,700	1,650
19	8,100	8,550	9,600	10,900	17,600	19,900	21,000	16,900	13,400	7,700	3,600	1,650
20	8,100	8,600	9,600	10,900	17,700	20,000	20,800	16,700	13,200	7,600	3,500	1,600
21	8,100	8,600	9,650	11,000	17,700	20,000	20,500	16,500	13,100	7,500	3,400	1,550
22	8,050	8,650	9,700	11,000	17,800	20,100	20,400	16,400	12,900	7,400	3,300	1,550
23	8,050	8,700	9,750	11,100	17,900	20,200	20,300	16,300	12,700	7,250	3,200	1,500
24	8,000	8,700	9,800	11,200	17,900	20,200	20,200	16,200	12,500	7,100	3,100	1,500
25	8,000	8,750	9,850	11,300	17,900	20,300	20,000	16,200	12,300	6,900	3,050	1,500
26	7,950	8,800	9,900	11,400	18,000	20,400	19,900	16,100	12,100	6,800	2,950	1,450
27	7,950	8,800	9,950	11,500	18,000	20,500	19,700	16,000	11,900	6,650	2,850	1,450
28	7,950	8,850	10,000	11,600	18,100	20,600	19,500	16,000	11,700	6,500	2,750	1,400
29	7,950	8,900	10,000	11,700	18,100	20,800	19,400	15,900	11,500	6,300	2,650	1,400
30	7,950	8,900	10,100	11,700	---	20,800	19,300	15,900	11,300	6,150	2,550	1,350
31	7,950	---	10,100	11,800	---	20,800	---	15,800	---	6,000	2,500	---

TABLE B-45

DAILY MEAN RELEASES FROM DWINNELL RESERVOIR

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1		52	18.4	77	59	38
2		49	26	73	61	30
3		52	38	72	60	27
4		54	42	72	55	19.0
5		49	46	71	49	15.7
6	No Releases	49	52	70	47	15.0
7		45	54	70	45	14.3
8		40	60	68	45	13.5
9		42	61	70	49	13.5
10		51	64	76	49	13.5
11		51	65	83	49	13.5
12		55	66	87	50	13.5
13	14.5	56	64	90	51	9.5
14	27	58	67	90	50	9.5
15	27	58	69	90	49	9.5
16	3.5	61	69	89	48	9.5
17	10.5	61	69	84	42	9.5
18	42	62	69	20	43	9.5
19	51	62	69	11.4	40	9.5
20	60	62	69	26	39	9.5
21	63	64	69	43	38	9.5
22	62	65	72	52	38	9.5
23	63	62	72	54	38	9.5
24	62	57	72	54	38	9.5
25	66	47	72	55	37	9.5
26	66	35	73	56	38	9.5
27	66	32	74	60	38	9.5
28	64	32	75	60	39	9.5
29	57	33	76	59	40	9.5
30	53	33	77	58	40	7.0
31	---	33	---	57	39	---
Mean	48	50	62	64	45	13
Releases in acre-feet	1,698	3,093	3,700	3,954	2,778	782

Total = 16,005 acre-feet

TABLE B-46

DAILY MEAN DISCHARGE OF SHASTA RIVER WATER ASSOCIATION PUMPING PLANT

March 1 to October 31, 1960

In second-feet

Day	March	April	May	June	July	August	September	October
1		14.7	40	40	40	40	40	40
2		14.7	40	40	39	40	40	40
3		14.7	40	40	40	40	40	40
4		14.7	40	40	31	40	40	40
5		14.7	40	40	31	40	40	40
6		40	40	40	38	40	40	40
7		40	40	40	40	40	40	40
8		40	40	40	40	40	40	40
9		40	40	40	40	39	40	40
10		40	40	40	40	40	40	34
11		40	40	40	40	33	40	21
12	No Flow	39	40	40	40	27	40	21
13		39	40	40	40	39	40	8.9
14		39	40	40	40	39	40	
15		39	40	40	40	40	40	
16		40	40	40	40	40	40	
17		40	40	40	40	37	40	
18		40	40	40	37	40	40	
19		40	40	40	40	40	40	
20		40	40	40	40	40	40	
21		40	40	40	40	40	40	
22		40	30	40	40	40	40	
23		40	0	40	40	40	40	
24		40	0	40	40	40	40	
25	8.5	40	33	40	40	40	40	
26	13.1	40	40	39	40	40	40	No Flow
27	9.8	40	40	40	40	40	40	
28	13.1	40	40	40	40	40	40	
29	13.1	40	40	40	40	40	40	
30	13.1	40	40	40	40	40	40	
31	13.7	---	40	---	40	40	---	
Mean	2.7	36	38	40	39	39	40	14.4
Runoff acre-feet	167	2,117	2,342	2,374	2,408	2,406	2,376	881

Total = 15,071 acre-feet

TABLE B-47

DAILY MEAN DISCHARGE OF GRENADA IRRIGATION DISTRICT PUMPING PLANT

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	No Flow	31	31	24	15	21
2		31	31	24	15	21
3		31	31	31	15	21
4		31	31	21	15	21
5		31	31	21	15	25
6	31	31	0	21	15	31
7	31	31	0	15	15	31
8	31	31	0	15	15	31
9	31	31	0	16	15	31
10	31	31	0	16	15	31
11	31	31	31	16	12	31
12	31	31	31	17	15	31
13	31	31	31	18	15	31
14	31	31	31	16	15	31
15	31	31	31	16	15	31
16	31	31	25	16	15	31
17	31	31	16	16	15	31
18	31	31	16	18	15	31
19	31	31	16	19	15	31
20	31	31	16	20	15	31
21	31	31	21	21	15	31
22	31	31	21	10	15	31
23	31	31	25	16	18	18
24	31	31	21	16	21	16
25	31	31	31	16	21	16
26	31	31	31	16	21	21
27	31	31	21	21	21	21
28	31	31	21	15	21	21
29	31	31	25	15	21	21
30	31	31	26	15	21	21
31	---	31	---	15	21	---
Mean	26	31	21	17.8	16.6	26
Runoff acre-feet	1,534	1,903	1,230	1,093	1,022	1,566

Total = 8,348 acre-feet

TABLE B-48

DAILY MEAN DISCHARGE OF SOUTH FORK PIT RIVER NEAR LIKELY

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	10.0	50	111	26	108	72
2	6.6	82	122	24	104	72
3	6.2	58	120	24	100	73
4	10.0	60	115	24	106	74
5	22	44	110	46	152	154
6	28	41	118	80	144	154
7	45	80	150	58	152	152
8	44	105	150	49	161	152
9	52	100	133	49	161	150
10	68	104	123	46	161	152
11	71	111	115	46	161	152
12	62	111	111	34	165	115
13	50	100	138	20	161	93
14	53	90	169	22	157	93
15	41	90	192	22	157	93
16	29	87	212	27	154	92
17	27	104	205	28	154	90
18	37	110	146	43	154	89
19	47	104	104	53	152	90
20	50	108	102	73	148	92
21	65	134	99	83	146	37
22	64	136	94	100	100	36
23	58	123	69	131	78	36
24	47	118	71	133	78	36
25	45	118	73	116	77	36
26	44	113	67	106	77	35
27	47	113	67	104	75	35
28	40	104	48	105	75	36
29	34	98	30	105	74	36
30	28	96	28	115	73	36
31	---	102	---	108	73	---
Mean	41	97	113	64	124	85
Runoff acre-feet	2,440	5,940	6,730	3,970	7,610	5,080

Total = 31,770 acre-feet

TABLE B-49

DAILY MEAN DISCHARGE OF SOUTH FORK PIT RIVER NEAR JESS VALLEY

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	8.1	57	106	19.0	27	4.9
2	4.9	86	116	19.0	23	4.9
3	6.0	62	113	20	6.8	
4	10.0	63	109	19.0	19.0	8.1
5	21	45	105	16.0	17.0	7.7
6	26	43	99	16.0	13.0	7.2
7	46	96	100	17.0	8.1	6.8
8	42	113	100	17.0	8.1	6.4
9	54	108	88	17.0	8.1	6.8
10	72	111	79	16.0	8.1	7.7
11	79	119	71	16.0	8.6	7.7
12	60	116	67	16.0	11.0	7.7
13	48	105	63	15.0	9.0	7.2
14	54	99	60	16.0	8.1	7.2
15	40	99	55	17.0	8.6	6.8
16	29	94	53	18.0	8.1	6.4
17	25	106	49	17.0	8.1	6.4
18	34	109	46	17.0	8.1	6.4
19	45	103	45	16.0	7.7	6.8
20	49	108	44	15.0	6.4	8.1
21	66	129	40	14.0	6.0	9.0
22	63	129	35	15.0	6.4	8.6
23	57	116	34	15.0	7.7	8.6
24	44	109	32	16.0	8.1	8.6
25	43	109	29	16.0	6.8	8.6
26	43	103	23	16.0	6.4	8.6
27	48	100	23	13.0	6.4	7.7
28	39	91	24	14.0	6.4	8.6
29	31	85	22	14.0	6.0	8.6
30	27	87	22	49	6.0	8.1
31	---	94	---	49	5.6	---
Mean	40	97	62	18.4	9.9	7.4
Runoff acre-feet	2,408	5,939	3,673	1,129	609	442

Total = 14,200 acre-feet

TABLE B-50

DAILY MEAN RELEASES OF WEST VALLEY RESERVOIR

June 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			No Releases	5.0	85	69
2				5.0	85	69
3				5.0	85	69
4				5.0	85	69
5				47	134	145
6			45	47	134	145
7			45	32	145	145
8			45	32	145	145
9			45	32	145	145
10			45	32	145	145
11			45	32	145	145
12			45	18	145	86
13			90	6.0	145	86
14			90	6.0	145	86
15			150	6.0	145	86
16	No Releases	No Releases	150	6.0	145	86
17			150	6.0	145	86
18			62	35	145	86
19			62	35	145	86
20			62	63	145	86
21			62	63	145	27
22			62	106	145	27
23			35	106	69	27
24			44	106	69	27
25			44	92	69	27
26			44	92	69	27
27			44	92	69	27
28			5	92	69	27
29			5	92	69	27
30			5	60	69	27
31			---	60	69	---
Mean			59	46	114	78
Runoff acre-feet			2,937	2,808	7,039	4,631

Total = 17,415 acre-feet

TABLE B-51

DAILY MEAN DISCHARGE OF PINE CREEK NEAR ALTURAS BELOW POWER HOUSE

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	15.0	17.0	32	19.0	11.0	7.7
2	14.0	23	37	18.0	10.0	7.7
3	14.0	20	47	18.0	10.0	8.3
4	15.0	41	57	17.0	10.0	8.3
5	16.0	28	60	16.0	10.0	7.7
6	16.0	23	60	15.0	9.6	7.0
7	24	33	60	15.0	9.6	7.0
8	19.0	30	58	15.0	9.6	6.4
9	19.0	30	54	14.0	8.9	7.0
10	18.0	31	49	14.0	8.9	7.0
11	18.0	32	45	14.0	8.9	7.7
12	17.0	32	42	13.0	8.9	7.7
13	16.0	31	40	13.0	8.9	7.0
14	18.0	37	40	12.0	8.3	7.0
15	16.0	41	40	12.0	8.3	7.0
16	15.0	43	39	11.0	8.3	7.0
17	15.0	43	39	11.0	8.3	7.0
18	15.0	41	37	11.0	7.7	6.4
19	15.0	41	36	11.0	7.7	6.4
20	15.0	43	34	11.0	8.3	7.0
21	17.0	41	31	10.0	8.3	7.0
22	17.0	38	30	10.0	9.6	7.0
23	16.0	35	28	9.6	8.9	7.7
24	16.0	35	26	9.6	8.9	7.7
25	15.0	33	25	10.0	8.3	7.7
26	15.0	33	24	10.0	8.3	7.0
27	15.0	33	23	9.6	8.3	7.0
28	15.0	31	21	10.0	8.3	7.0
29	15.0	30	20	9.6	7.7	6.4
30	15.0	30	19.0	18.0	7.7	6.4
31	---	30	---	14.0	7.0	---
Mean	16.2	33	38	12.9	8.8	7.2
Runoff acre-feet	964	2,041	2,287	794	541	427

Total = 7,807 acre-feet

TABLE B-52

DAILY MEAN DISCHARGE OF PIT RIVER BELOW ALTURAS

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	97	58	77	84	63	71
2	123	65	94	82	90	72
3	142	106	123	79	115	72
4	153	177	128	77	83	73
5	173	253	127	74	74	73
6	142	211	123	72	72	73
7	181	192	95	69	72	73
8	214	275	92	67	73	74
9	181	233	108	64	73	74
10	149	210	116	76	74	69
11	129	156	131	77	74	69
12	128	102	137	61	75	71
13	106	127	131	56	75	75
14	117	124	126	54	76	73
15	137	121	122	50	76	81
16	94	123	116	49	77	85
17	75	127	116	44	77	73
18	75	137	115	42	78	70
19	71	177	115	44	78	61
20	60	193	114	46	81	40
21	50	231	114	47	89	26
22	50	222	113	49	94	24
23	56	228	112	50	106	23
24	63	179	110	52	86	22
25	61	171	102	54	70	24
26	77	162	89	55	64	26
27	74	153	73	56	71	27
28	88	145	83	58	73	26
29	82	137	96	60	70	26
30	66	116	86	62	67	24
31	---	89	---	64	70	---
Mean	107	161	109	61	78	56
Runoff acre-feet	6,375	9,918	6,514	3,719	4,792	3,312

Total = 34,630 acre-feet

TABLE B-53

DAILY MEAN RELEASES FROM BIG SAGE RESERVOIR

May 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1			35	34	55	55
2			35	48	55	43
3			35	48	55	43
4			35	48	55	43
5		No Releases	35	48	55	43
6			35	48	55	43
7			35	48	55	43
8			35	48	55	43
9			35	48	55	43
10			35	48	55	43
11			35	23	55	43
12			35	23	55	43
13		26	97	23	55	43
14		26	97	23	55	43
15		26	97	23	55	43
16		26	97	23	55	43
17		26	97	23	55	43
18		26	34	23	55	43
19		26	34	23	55	43
20	No Releases	26	34	55	55	
21		26	34	55	55	
22		26	34	55	55	
23		26	34	55	55	
24		26	34	55	55	
25		26	34	55	55	
26		26	34	55	55	No Releases
27		26	34	55	55	
28		26	34	55	55	
29		26	34	55	55	
30		26	34	55	55	
31		35	---	55	55	
Mean		26	45	43	55	44
Runoff acre-feet		998	2,672	2,644	3,382	1,644

Total = 11,321 acre-feet

TABLE B-54

DAILY MEAN DISCHARGE OF BIDWELL CREEK NEAR FORT BIDWELL

March 1 to September 30, 1960

In second-feet

Day	March	April	May	June	July	August	September
1	3.4	17.0	35	72	12.0	5.3	2.8
2	3.4	22	42	75	11.0	5.1	2.8
3	3.4	32	43	75	11.0	4.8	3.0
4	3.8	42	39	70	11.0	4.5	3.2
5	5.3	46	37	66	9.9	4.3	3.0
6	14.0	49	39	61	9.5	4.0	3.0
7	23	59	72	57	9.5	3.6	3.0
8	16.0	53	72	53	8.7	3.6	2.8
9	10.0	52	67	49	8.3	3.6	2.8
10	8.3	52	67	45	7.9	3.4	2.8
11	6.5	51	70	42	7.9	3.6	2.8
12	6.2	42	70	41	7.6	3.6	2.8
13	7.2	38	67	39	7.2	3.6	2.8
14	6.9	40	66	38	6.9	3.6	2.8
15	6.5	35	66	35	7.2	3.6	2.8
16	5.9	30	66	33	6.9	3.8	2.8
17	6.5	28	61	30	6.2	3.6	2.6
18	12.0	28	56	28	5.9	3.4	2.6
19	16.0	30	51	26	5.9	3.2	2.6
20	20	34	53	24	5.9	3.0	2.8
21	26	39	52	22	5.6	3.0	2.8
22	30	36	50	20	5.3	4.3	2.8
23	32	33	44	18.0	5.6	4.0	2.8
24	35	29	40	17.0	5.3	3.8	3.0
25	37	26	41	16.0	5.3	3.8	3.0
26	36	23	47	16.0	5.3	3.6	2.8
27	29	22	50	15.0	5.1	3.6	2.8
28	25	22	53	14.0	4.8	3.4	3.0
29	19.0	22	57	14.0	6.8	3.2	2.8
30	16.0	26	63	13.0	7.6	3.0	2.8
31	14.0	---	69	---	6.2	2.8	---
Mean	15.6	35	55	37	7.4	3.7	2.8
Runoff acre-feet	959	2,099	3,382	2,229	455	229	169

Total = 9,522 acre-feet

TABLE B-55

DAILY MEAN DISCHARGE OF MILL CREEK

March 1 to September 30, 1960

In second-feet

Day	March	April	May	June	July	August	September
1	No Record	31	9.9	32	5.8	3.0	1.6
2		27	19.0	32	5.5	2.6	1.6
3		25	21	32	5.5	2.1	1.7
4		25	43	32	5.2	2.1	2.0
5		27	39	33	4.9	2.0	No Record
6		26	34	32	4.4	1.8	
7		36	47	32	4.2	1.7	
8		36	53	31	4.2	2.1	
9		34	44	29	4.1	2.3	
10		32	40	26	4.2	2.1	
11		29	39	24	4.2	2.1	
12		25	39	22	3.6	2.1	
13		25	38	21	3.2	2.5	
14		25	36	19.0	3.2	2.6	
15		21	36	19.0	3.0	2.6	
16		18.0	36	19.0	3.0	3.0	
17		14.0	34	16.0	2.6	3.0	
18		12.0	31	15.0	2.6	2.6	
19		12.0	29	14.0	3.0	2.3	
20		11.0	30	12.0	2.8	2.1	
21		11.0	39	11.0	2.6	2.0	
22		11.0	32	10.0	2.6	2.8	
23		11.0	23	9.1	2.6	2.6	
24		11.0	19.0	8.0	2.6	2.6	
25		10.0	22	7.4	2.5	2.5	
26		9.5	22	7.4	2.1	2.3	
27		9.0	23	7.1	2.1	2.3	
28	14.0	8.3	25	6.5	2.8	2.1	
29	13.0	8.0	26	6.0	2.8	2.1	
30	18.0	8.0	30	5.8	2.8	2.1	
31	24	---	32	---	3.0	1.6	
Mean	17.2	19.6	32	19.0	3.5	2.3	1.7
Runoff acre-feet	1,137	1,163	1,962	1,129	213	142	13.7

Total = 4,760 acre-feet

TABLE B-56

DAILY MEAN DISCHARGE OF SOLDIER CREEK

March 1 to September 30, 1960

In second-feet

Day	March	April	May	June	July	August	September
1		10.0	13.0	23	3.6	2.5	2.4
2		16.0	24	22	3.4	2.5	2.4
3		21	18.0	21	3.4	2.5	2.3
4		25	20	19.0	3.4	2.5	2.2
5		25	20	16.0	3.6	2.6	2.1
6		25	23	14.0	4.2	2.5	2.1
7		28	43	14.0	4.0	2.6	2.0
8		21	36	13.0	3.7	2.6	2.0
9		20	35	12.0	3.6	2.6	2.0
10	No Record	21	30	11.0	3.4	2.6	2.1
11		15.0	27	10.0	3.2	2.6	2.0
12		7.2	23	8.8	3.2	2.6	2.0
13		11.0	20	8.8	3.0	2.7	2.0
14		12.0	19.0	8.8	2.9	2.7	2.0
15		11.0	19.0	8.3	2.8	2.7	2.0
16		9.6	17.0	8.0	2.6	2.7	1.9
17		7.4	15.0	8.0	2.5	2.6	1.8
18		9.2	13.0	7.6	2.4	2.6	1.7
19	10.0	11.0	13.0	7.4	2.4	2.5	1.6
20	13.0	15.0	15.0	6.0	2.4	2.5	1.5
21	14.0	13.0	13.0	5.0	2.2	2.4	
22	15.0	12.0	7.2	5.5	2.2	2.6	
23	17.0	12.0	11.0	5.0	2.1	2.3	
24	18.0	7.4	15.0	5.0	2.1	2.2	
25	20	6.5	17.0	5.0	2.1	2.7	
26	18.0	5.6	22	5.0	2.2	2.1	No Record
27	15.0	5.6	23	4.8	2.2	2.1	
28	11.0	5.2	21	4.4	No Record	2.1	
29	8.4	6.5	21	4.0		2.2	
30	9.2	8.0	22	3.7		2.3	
31	9.2	---	23	---		2.3	
Mean	13.7	13.4	21	9.8	2.9	2.5	2.0
Runoff acre-feet	356	804	1,276	588	158	154	80

Total = 3,450 acre-feet

TABLE B-57

DAILY MEAN DISCHARGE OF PINE CREEK

March 1 to May 31, 1960

In second-feet

Day	March	April	May	June	July	August	September
1		6.8	6.2				
2		14.0	8.3				
3		19.0	6.4				
4		22	7.2				
5		21	11.0				
6		21	10.0				
7		22	41				
8		18.0	12.0				
9		15.0	10.0				
10	No Record	13.0	8.7				
11		10.0	7.3				
12		7.5	6.1				
13		8.1	5.4				
14		6.0	4.5				
15		5.9	4.1				
16		5.5	3.6	No Record	No Record	No Record	No Record
17		5.4	2.4				
18		6.2	1.6				
19		7.0	1.4				
20	9.7	8.1	2.3				
21	12.0	6.8	4.2				
22	13.0	5.9	3.6				
23	13.0	4.9	2.8				
24	16.0	4.0	3.2				
25	13.0	3.6	4.2				
26	16.0	3.5	4.2				
27	12.0	3.5	3.5				
28	9.1	3.2	2.9				
29	6.1	3.6	2.5				
30	5.0	4.0	2.4				
31	3.8	---	2.2				
Mean	10.7	9.5	6.3				
Runoff acre-feet	255	563	386				

Total = 1,204 acre-feet

TABLE B-58

DAILY MEAN DISCHARGE OF CEDAR CREEK AT CEDARVILLE

March 1 to September 30, 1960

In second-feet

Day	March	April	May	June	July	August	September
1	1.2	15.0	8.8	7.0	1.4	0.2	0
2	1.0	20	11.0	7.0	1.4	0.2	0
3	1.2	21	10.0	6.4	1.2	0.2	0.2
4	1.4	24	12.0	6.4	1.2	0.2	0.1
5	3.1	24	13.0	5.9	1.2	0.1	0.1
6	7.0	25	13.0	7.0	1.0	0.1	0.1
7	12	24	13.0	9.5	1.0	0.1	0.1
8	4.5	24	14.0	8.8	1.0	0.1	0.1
9	4.1	21	13.0	8.2	1.0	0.1	0.1
10	4.5	20	13.0	7.0	0.9	0.1	0.1
11	4.5	18.0	13.0	5.4	0.8	0.1	0.1
12	4.5	17.0	13.0	4.5	0.7	0.1	0.1
13	5.4	15.0	13.0	3.7	0.7	0.1	0.1
14	5.4	17.0	12.0	3.4	0.7	0.1	0.1
15	4.9	15.0	12.0	3.1	0.7	0.1	0
16	4.5	14.0	11.0	2.8	0.7	0.1	0
17	5.9	13.0	10.0	2.5	0.7	0.1	0.1
18	7.0	13.0	9.5	3.5	0.7	0.1	0.1
19	8.8	14.0	9.5	2.2	0.7	0	0
20	8.8	13.0	10.0	2.0	0.7	0	0.1
21	9.5	13.0	10.0	1.7	0.7	0	0.1
22	9.5	12.0	9.5	1.7	0.6	0.2	0.1
23	10.0	10.0	8.8	1.7	0.6	0.2	0.1
24	13.0	9.5	8.8	1.7	0.5	0.2	0.1
25	15.0	8.8	8.8	1.7	0.4	0.1	0.1
26	15.0	8.8	9.5	1.7	0.5	0.1	0.1
27	17.0	8.2	9.5	1.5	0.6	0.1	0.1
28	15.0	7.5	8.8	1.5	0.7	0.1	0.1
29	14.0	7.5	8.2	1.5	0.7	0.1	0.1
30	13.0	7.5	8.2	1.5	4.9	0.1	0.1
31	13.0	---	7.0	---	0.3	0.1	---
Mean	7.9	15.3	10.7	4.1	0.9	0.1	0.1
Runoff acre-feet	483	912	656	241	57	7.0	5.0

Total = 2,361 acre-feet

TABLE B-59

DAILY MEAN DISCHARGE OF NORTH DEEP CREEK

March 1 to September 30, 1960

In second-feet

Day	March	April	May	June	July	August	September
1		11.0	3.5	5.4	0.6	1.6	0.3
2		12.0	4.7	5.0	0.6	1.3	0.3
3		11.0	5.0	4.7	0.6	1.1	0.3
4		9.4	6.4	4.7	0.4	1.1	0.3
5		9.4	6.7	4.7	0.4	0.6	0.3
6		9.0	7.4	4.7	0.4	0.3	0.2
7		12.0	10.0	4.0	0.4	0.3	0.2
8		9.8	11.0	3.8	0.4	0.3	0.2
9		9.0	11.0	3.5	0.4	0.3	0.2
10		9.0	11.0	3.0	0.4	0.3	0.2
11		7.8	11.0	3.0	0.3	0.3	0.2
12		6.7	11.0	2.7	0.3	0.3	0.2
13	No Record	6.4	9.0	2.7	0.3	0.3	0.2
14		6.4	9.0	2.5	0.3	0.3	0.2
15		6.4	8.6	2.5	0.3	0.3	0.2
16		6.0	8.6	2.3	0.3	0.4	0.2
17		5.4	7.8	2.0	0.3	0.4	0.2
18		5.4	7.1	2.3	0.3	0.6	0.2
19		5.0	6.7	2.3	0.3	0.6	0.2
20		4.7	6.4	1.9	0.3	0.6	0.2
21		4.7	7.1	1.5	0.3	0.6	
22		4.7	6.4	1.3	0.3	0.4	
23		4.5	5.7	1.1	0.3	0.4	
24		4.0	5.4	0.9	0.3	0.4	
25		3.8	5.4	0.9	0.3	0.4	
26		3.8	5.4	0.9	0.4	0.4	No Record
27		3.8	5.4	0.9	0.4	0.4	
28		3.5	5.4	0.7	0.4	0.4	
29	8.6	3.2	5.7	0.7	0.4	0.4	
30	10.0	3.2	5.7	0.6	4.0	0.3	
31	11.0	---	5.7	---	7.1	0.3	
Mean	9.9	6.7	7.3	2.6	0.7	0.5	0.2
Runoff acre-feet	59	398	446	153	43	31	8.9

Total = 1,139 acre-feet

TABLE B-60

DAILY MEAN DISCHARGE OF SOUTH DEEP CREEK

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	No Rec.	5.5	8.0	1.5	2.0	0.5
2		8.4	7.7	1.5	1.0	0.5
3		8.0	7.7	1.3	1.0	0.7
4	17.0	11.0	7.7	1.3	0.5	0.7
5	18.0	12.0	7.0	1.3	0.4	0.6
6	19.0	12.0	6.4	1.3	0.4	0.7
7	21	18.0	5.8	1.3	0.3	0.6
8	18.0	18.0	5.2	1.2	0.3	0.4
9	16.0	16.0	4.5	1.1	0.3	0.4
10	15.0	16.0	3.6	1.0	0.3	0.4
11	14.0	16.0	3.0	1.1	0.2	0.4
12	11.0	15.0	2.5	1.1	0.5	0.4
13	10.0	14.0	2.4	1.0	0.5	0.4
14	11.0	14.0	2.4	1.0	0.4	0.4
15	9.2	13.0	2.4	1.0	0.5	0.4
16	8.4	13.0	2.2	0.9	0.5	0.3
17	8.0	12.0	2.0	0.9	0.6	0.4
18	8.0	11.0	2.1	0.8	0.6	0.3
19	8.0	12.0	2.1	0.8	0.6	0.3
20	8.0	10.0	2.1	0.7	0.6	0.3
21	8.0	10.0	2.1	0.7	0.6	
22	8.0	10.0	2.0	0.6	1.0	
23	7.4	9.2	1.9	0.5	1.0	
24	6.7	9.2	1.8	0.5	1.0	
25	6.1	9.2	1.9	0.5	0.9	
26	5.8	9.2	1.9	0.6	0.9	No Record
27	5.5	9.2	1.8	0.6	0.8	
28	5.2	8.6	1.7	0.8	0.7	
29	3.9	8.4	1.6	0.8	0.7	
30	3.6	8.4	1.5	4.5	0.7	
31	---	8.4	---	3.0	0.7	
Mean	10.4	11.4	3.5	1.1	0.7	0.4
Runoff acre-feet	554	702	208	70	42	18.0

Total = 1,592 acre-feet

TABLE B-61

DAILY MEAN DISCHARGE OF OWL CREEK

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	No Record	21	57	12.0	5.0	2.5
2		20	57	12.0	3.5	2.5
3		18.0	54	11.0	3.5	2.5
4		19.0	55	10.0	3.5	2.5
5		17.0	49	10.0	3.5	2.5
6		19.0	47	8.8	3.5	2.5
7	30	34	50	8.8	3.5	2.5
8	21	29	50	6.4	3.9	2.5
9	20	28	50	6.4	3.9	2.5
10	16.0	27	50	6.2	2.8	2.5
11	15.0	30	49	6.2	2.6	2.5
12	13.0	28	49	6.2	2.6	2.5
13	12.0	24	49	6.3	2.7	2.5
14	13.0	23	49	6.2	2.7	2.5
15	12.0	24	45	6.1	2.9	2.5
16	11.0	24	40	6.1	3.0	2.5
17	11.0	26	39	6.1	3.2	2.5
18	11.0	26	35	6.1	3.3	2.5
19	11.0	24	34	6.0	3.3	2.5
20	12.0	27	32	5.8	3.3	2.5
21	13.0	28	31	5.7	3.3	
22	13.0	26	27	5.7	3.2	
23	12.0	25	33	5.6	3.2	
24	11.0	24	31	5.7	2.8	
25	11.0	28	27	6.2	2.5	
26	11.0	30	23	5.9	2.8	No Record
27	10.0	33	19.0	5.9	2.7	
28	10.0	35	17.0	5.9	2.7	
29	10.0	40	14.0	5.9	2.6	
30	11.0	49	13.0	30	2.5	
31	---	51	---	15.0	2.5	
Mean	13.3	28	39	8.1	3.1	2.5
Runoff acre-feet	634	1,697	2,326	495	192	99

Total = 5,443 acre-feet

TABLE B-62

DAILY MEAN DISCHARGE OF RADER CREEK

April 1 to September 30, 1961

In second-feet

Day	April	May	June	July	August	September
1	No Record	6.7	25	8.7	3.3	1.4
2		8.4	22	8.4	2.4	1.4
3		7.0	21	7.8	2.2	1.4
4		6.7	20	7.1	2.0	1.4
5		6.2	26	7.1	2.0	1.4
6	12.0	6.7	24	7.8	2.0	1.4
7	12.0	12.0	35	7.1	2.0	1.4
8	11.0	11.0	33	6.8	2.0	1.4
9	11.0	11.0	29	6.8	1.7	1.4
10	11.0	15.0	31	6.2	1.7	1.4
11	10.0	16.0	33	5.4	1.7	1.4
12	9.6	17.0	33	5.1	1.7	1.2
13	9.6	17.0	33	4.6	1.7	1.2
14	7.5	17.0	32	4.3	1.7	1.1
15	6.7	14.0	27	4.3	1.7	1.1
16	6.2	14.0	22	4.1	1.6	1.1
17	5.9	15.0	20	3.8	1.6	1.1
18	5.9	14.0	18.0	3.8	1.6	1.1
19	5.9	14.0	16.0	3.8	1.6	1.1
20	7.0	16.0	16.0	3.6	1.6	1.1
21	7.0	20	15.0	3.3	1.6	
22	6.2	18.0	15.0	3.1	1.6	
23	5.9	17.0	15.0	3.1	1.6	
24	5.9	15.0	14.0	3.3	1.4	
25	5.9	15.0	14.0	3.1	1.4	
26	5.9	14.0	14.0	3.1	1.4	No Record
27	5.9	15.0	11.0	2.9	1.4	
28	5.9	15.0	9.4	2.9	1.4	
29	5.6	16.0	9.0	3.1	1.4	
30	5.9	19.0	8.7	4.1	1.4	
31	---	22	---	4.3	1.2	
Mean	7.6	13.9	21	4.9	1.7	1.3
Runoff acre-feet	379	853	1,269	303	106	50

Total = 2,960 acre-feet

TABLE B-63

DAILY MEAN DISCHARGE OF EAGLE CREEK AT EAGLEVILLE

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	4.0	6.7	35	11.0	3.3	1.5
2	4.0	7.7	45	9.8	3.1	1.6
3	4.8	7.2	47	8.9	3.0	1.7
4	6.2	6.6	44	8.2	2.8	1.6
5	7.9	6.4	39	7.9	2.7	1.5
6	9.2	7.7	39	7.5	2.7	1.5
7	11.0	20	42	7.2	2.6	1.5
8	10.0	17.0	36	7.0	2.5	1.5
9	9.8	17.0	32	6.6	2.5	1.4
10	9.2	21	31	6.4	2.2	1.4
11	8.4	23	34	6.0	1.8	1.5
12	7.0	22	38	5.6	1.8	1.4
13	7.0	19.0	40	5.4	1.8	1.4
14	6.6	19.0	42	5.2	1.8	1.4
15	5.8	21	44	4.8	1.8	1.4
16	5.2	22	40	4.4	1.8	1.4
17	5.2	19.0	36	4.4	1.8	1.4
18	5.2	16.0	31	4.0	1.7	1.4
19	5.6	15.0	27	3.9	1.6	1.3
20	6.4	18.0	24	3.8	1.6	1.4
21	6.8	18.0	20	3.6	1.5	1.4
22	6.4	15.0	18.0	3.5	1.8	1.4
23	5.8	13.0	17.0	3.6	1.7	1.3
24	5.6	12.0	17.0	3.3	1.7	1.3
25	5.0	12.0	16.0	3.5	1.7	1.3
26	4.8	12.0	15.0	3.3	1.6	1.2
27	4.7	14.0	15.0	3.3	1.6	1.3
28	4.5	15.0	13.0	3.5	1.6	1.3
29	4.4	18.0	13.0	3.5	1.5	1.3
30	4.7	23	12.0	5.0	1.4	1.3
31	---	29	---	3.8	1.4	---
Mean	6.4	15.9	30	5.4	2.0	1.4
Runoff acre-feet	379	976	1,789	333	124	84

Total = 3,898 acre-feet

TABLE B-64

DAILY MEAN DISCHARGE OF EMERSON CREEK

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	No Rec.	7.8	17.0	4.5	2.9	2.7
2		9.8	18.0	4.5	2.9	2.7
3		9.3	19.0	4.3	2.9	2.7
4		8.6	19.0	4.1	2.9	2.7
5	13.0	8.6	18.0	4.1	2.8	2.7
6	14.0	9.8	17.0	4.0	2.8	2.7
7	16.0	15.0	17.0	3.8	2.8	2.7
8	15.0	15.0	16.0	3.6	2.7	2.7
9	15.0	15.0	15.0	3.5	2.7	2.7
10	17.0	16.0	14.0	3.5	2.7	2.7
11	15.0	17.0	13.0	3.4	2.7	2.7
12	13.0	17.0	12.0	3.4	2.6	2.6
13	11.0	16.0	11.0	3.4	2.6	2.6
14	10.0	16.0	11.0	3.4	2.6	2.6
15	9.3	16.0	9.8	3.2	2.6	2.6
16	8.1	16.0	9.3	3.1	2.6	2.6
17	7.8	15.0	9.3	3.1	2.6	2.6
18	7.8	14.0	8.6	3.1	2.6	2.6
19	8.1	14.0	7.8	2.9	2.6	2.6
20	9.0	16.0	7.5	2.9	2.6	2.6
21	9.3	16.0	7.2	2.9	2.6	
22	9.0	15.0	6.9	2.9	2.7	
23	8.1	14.0	6.3	2.8	2.7	
24	7.8	15.0	6.0	2.8	2.7	
25	7.5	13.0	5.8	2.8	2.7	
26	7.2	13.0	6.1	2.8	2.7	No Record
27	7.2	13.0	5.3	2.8	2.7	
28	6.6	13.0	4.9	2.8	2.7	
29	6.6	14.0	4.9	2.8	2.7	
30	6.6	15.0	4.7	3.1	2.7	
31	---	16.0	---	2.9	2.7	
Mean	10.2	13.8	10.9	3.3	2.7	2.6
Runoff acre-feet	525	849	648	204	166	105

Total = 2,497 acre-feet

TABLE B-65

DAILY MEAN DISCHARGE OF SUSAN RIVER AT SUSANVILLE

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	141	45	28	7.2	1.4	1.9
2	138	51	28	5.4	1.3	1.8
3	144	47	113	4.8	2.0	1.9
4	153	48	122	4.0	1.5	2.0
5	155	48	140	3.5	1.4	2.0
6	157	50	135	4.0	1.2	2.0
7	160	72	132	4.5	1.2	2.0
8	148	67	129	5.1	1.2	2.0
9	138	61	129	3.6	1.2	2.2
10	129	64	123	3.6	1.2	2.3
11	116	64	123	3.0	.9	2.1
12	102	61	122	3.2	1.2	2.1
13	95	60	124	2.6	1.4	2.1
14	98	57	123	2.4	1.4	2.1
15	85	54	120	2.3	1.8	2.0
16	78	49	120	2.3	1.9	2.0
17	74	47	120	2.2	2.0	2.0
18	71	52	119	2.1	2.2	2.0
19	77	52	119	2.1	2.0	2.0
20	71	56	116	2.0	2.1	2.0
21	70	73	116	2.4	2.0	2.3
22	73	61	113	1.2	.8	3.0
23	74	65	110	.9	1.8	2.7
24	70	80	106	1.2	3.3	2.6
25	62	75	100	.8	2.4	2.6
26	58	67	91	1.7	2.5	2.7
27	61	58	77	1.2	2.2	2.3
28	55	53	34	2.1	1.9	2.6
29	50	46	14.0	2.8	2.0	2.6
30	46	43	9.7	1.4	2.0	2.6
31	---	41	---	1.4	1.9	---
Mean	98	57	102	2.8	1.7	2.2
Runoff acre-feet	5,850	3,500	6,060	173	106	132

Total = 15,821 acre-feet

TABLE B-66

DAILY MEAN DISCHARGE OF GOLD RUN CREEK ABOVE DIVERSIONS

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	9.2	9.5	9.5	1.2	0.2	0.1
2	9.5	11.0	9.5	1.2	0.2	0.1
3	11.0	11.0	8.8	1.1	0.2	0.1
4	13.0	10.0	8.5	1.0	0.2	0.2
5	14.0	10.0	8.1	0.9	0.2	0.2
6	16.0	12.0	7.5	1.0	0.2	0.1
7	17.0	16.0	7.2	0.9	0.1	0.1
8	17.0	16.0	6.1	0.8	0.1	0.1
9	17.0	16.0	5.6	0.7	0.1	0.2
10	16.0	18.0	4.8	0.6	0.1	0.2
11	14.0	18.0	4.8	0.5	0.1	0.2
12	12.0	17.0	4.8	0.5	0.1	0.1
13	13.0	15.0	4.4	0.5	0.1	0.1
14	13.0	14.0	4.2	0.4	0.1	0.1
15	12.0	14.0	4.2	0.4	0.1	0.1
16	11.0	13.0	3.8	0.4	0.1	0.1
17	11.0	13.0	3.4	0.3	0.1	0.1
18	12.0	11.0	3.3	0.3	0.1	0.1
19	13.0	11.0	2.9	0.2	0.1	0.1
20	14.0	11.0	2.8	0.2	0.1	0.1
21	15.0	11.0	2.6	0.2	0.1	0.1
22	14.0	9.2	2.3	0.2	0.1	0.1
23	11.0	8.5	2.1	0.1	0.2	0.2
24	10.0	8.5	1.8	0.1	0.2	0.1
25	9.5	8.5	1.8	0.1	0.2	0.1
26	9.2	8.8	1.7	0.1	0.2	0.1
27	8.8	8.5	1.5	0.2	0.2	0.1
28	8.1	8.5	1.4	0.2	0.2	0.1
29	7.8	8.5	1.3	0.3	0.2	0.1
30	8.1	8.5	1.2	0.2	0.1	0.2
31	---	9.2	---	0.2	0.1	---
Mean	12.2	11.7	4.4	0.5	0.1	0.1
Runoff acre-feet	726	722	262	30	9.0	7.0

Total = 1,756 acre-feet

TABLE B-67

DAILY MEAN DISCHARGE OF SUSAN RIVER AT JOHNSTONVILLE BRIDGE

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	No Rec.	32	25	2.0	No Record	No Record
2		35	17.0	4.0		
3		35	15.0	2.0		
4		38	11.0	2.0		
5	110	35	11.0	2.0		
6	105	14.0	11.0	2.0		
7	100	15.0	11.0	2.0		
8	98	15.0	11.0	2.0		
9	95	16.0	11.0	2.0		
10	90	18.0	11.0	2.0		
11	90	25	5.0	1.0		
12	88	26	5.0	1.0		
13	88	24	5.0	1.0		
14	87	14.0	5.0	1.0		
15	85	20	5.0	1.0		
16	47	20	5.0	1.0		
17	18	18.0	5.0	1.0		
18	31	43	3.0	1.0		
19	36	45	3.0	1.0		
20	65	40	3.0	1.0		
21	68	40	3.0	1.0		
22	70	42	3.0	1.0		
23	48	45	3.0	1.0		
24	47	38	3.0	1.0		
25	44		2.0	1.0		
26	43	53	2.0	1.0		
27	44	47	2.0	1.0		
28	36	44	2.0	1.0		
29	32	45	2.0	1.0		
30	26	35	2.0	1.0		
31	---	35	---	1.0		
Mean	65	31	6.7	1.4		
Runoff acre-feet	3,348	1,885	400	85		

Total = 5,718 acre-feet

TABLE B-68

DAILY MEAN DISCHARGE OF WILLOW CREEK NEAR SUSANVILLE

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	43	18.0	17.0	12.0	12.0	12.0
2	40	17.0	17.0	12.0	12.0	12.0
3	38	16.0	16.0	12.0	12.0	12.0
4	36	17.0	15.0	12.0	12.0	11.0
5	26	18.0	15.0	12.0	11.0	11.0
6	21	19.0	14.0	12.0	11.0	11.0
7	21	20	14.0	12.0	12.0	12.0
8	21	20	13.0	12.0	12.0	12.0
9	20	20	13.0	12.0	12.0	12.0
10	20	19.0	13.0	11.0	12.0	12.0
11	22	19.0	13.0	11.0	12.0	12.0
12	21	18.0	13.0	11.0	12.0	12.0
13	20	18.0	13.0	12.0	12.0	12.0
14	20	18.0	13.0	12.0	12.0	11.0
15	20	19.0	12.0	12.0	12.0	12.0
16	20	18.0	12.0	12.0	12.0	12.0
17	18.0	16.0	12.0	12.0	12.0	12.0
18	18.0	14.0	12.0	12.0	12.0	12.0
19	18.0	13.0	12.0	11.0	12.0	12.0
20	14.0	13.0	12.0	11.0	12.0	12.0
21	16.0	14.0	12.0	11.0	12.0	12.0
22	19.0	15.0	12.0	11.0	12.0	12.0
23	22	15.0	12.0	11.0	12.0	12.0
24	19.0	15.0	12.0	11.0	12.0	12.0
25	19.0	15.0	12.0	12.0	12.0	12.0
26	21	16.0	12.0	12.0	12.0	12.0
27	23	17.0	12.0	12.0	12.0	12.0
28	23	17.0	12.0	12.0	12.0	12.0
29	20	18.0	12.0	12.0	12.0	12.0
30	19.0	18.0	12.0	12.0	13.0	12.0
31	---	18.0	---	12.0	12.0	---
Mean	23	17.0	13.0	11.7	12.0	11.9
Runoff acre-feet	1,340	1,050	776	720	736	706

Total = 5,328 acre-feet

TABLE B-69

DAILY MEAN DISCHARGE OF OLD SUSAN CHANNEL AT BROCKMAN SLOUGH

July 22 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1					1.9	1.6
2					1.6	1.6
3					1.6	1.6
4					1.7	1.6
5					1.6	1.6
6					1.6	1.5
7					1.6	1.6
8					1.6	1.6
9					1.6	1.6
10				No Record	1.6	1.6
11					1.2	1.7
12					1.2	1.7
13					1.3	2.0
14					1.4	2.1
15					1.5	2.1
16	No Record	No Record	No Record		1.7	2.1
17					1.7	2.1
18					1.8	2.1
19					1.8	2.0
20					1.6	1.6
21					1.6	0.6
22				2.0	1.7	1.8
23				2.0	1.6	2.2
24				2.5	1.8	2.5
25				2.5	1.8	2.4
26				1.8	1.6	1.8
27				1.7	1.7	1.7
28				1.7	1.6	1.6
29				1.9	1.6	1.5
30				1.9	1.6	1.5
31				1.8	1.6	---
Mean				2.0	1.6	1.8
Runoff acre-feet				39	99	105

Total = 243 acre-feet

TABLE B-70

DAILY MEAN DISCHARGE OF OLD SUSAN CHANNEL AT JENSEN SLOUGH

July 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1					2.2	2.8
2					2.3	2.9
3					2.3	2.9
4					2.4	2.5
5					2.1	2.5
6					2.0	2.5
7					2.0	2.5
8					2.1	2.5
9					1.9	2.3
10					2.0	2.3
11				No Record	2.5	2.4
12					2.5	2.6
13					2.4	2.8
14					2.5	2.6
15					2.9	2.5
16	No Record	No Record	No Record		2.5	2.5
17					2.5	2.5
18					2.4	2.5
19					2.3	2.6
20					2.3	2.6
21					2.4	4.1
22				2.0	2.5	3.6
23				1.8	2.7	2.9
24				1.9	1.9	3.2
25				2.0	1.9	3.3
26				1.9	2.0	2.9
27				2.0	2.1	2.8
28				2.0	2.1	2.8
29				2.2	2.6	2.7
30				2.5	2.9	2.8
31				2.4	2.9	---
Mean				2.1	2.3	2.7
Runoff acre-feet				41	143	163

Total = 350 acre-feet

TABLE B-71

DAILY MEAN DISCHARGE OF OLD SUSAN CHANNEL AT LEROY CRAMER

July 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1					0.5	0.6
2					0.7	0.6
3					0.7	0.6
4					0.6	0.6
5					0.6	0.6
6					0.6	0.6
7					0.5	0.7
8					0.5	0.2
9					0.4	0
10				No Record	0.4	0
11					0.3	0.3
12					0.3	0.3
13					0.3	0.3
14					0.5	0.2
15					0.6	0.2
16	No Record	No Record	No Record		0.4	0.2
17					0.6	0.2
18					0.8	0.9
19					0.6	0.8
20					0.5	0.6
21					0.5	0.3
22				0.3	0	0.8
23				0.4	0.1	0.3
24				0.4	0.5	0.4
25				0.4	0.5	0.6
26				0.5	0.5	0.5
27				0.5	0.5	0.5
28				0.5	0.6	0.5
29				0.5	0.4	0.5
30				0.5	0.4	0.5
31				0.6	0.4	---
Mean				0.5	0.5	0.4
Runoff acre-feet				9.1	29	26

Total = 64 acre-feet

TABLE B-72

DAILY MEAN DISCHARGE OF WILLOW CREEK NEAR LITCHFIELD

April 1 to September 30, 1960

In second-feet

Day	April	May	June	July	August	September
1	46	20	19.0	15.0	14.0	16.0
2	43	19.0	18.0	15.0	14.0	16.0
3	41	18.0	18.0	15.0	14.0	15.0
4	39	19.0	18.0	15.0	14.0	15.0
5	31	20	17.0	15.0	14.0	15.0
6	25	20	16.0	15.0	14.0	15.0
7	24	21	15.0	16.0	14.0	15.0
8	24	21	15.0	16.0	14.0	16.0
9	23	21	15.0	16.0	14.0	16.0
10	22	21	15.0	15.0	14.0	16.0
11	24	20	15.0	15.0	13.0	16.0
12	24	20	15.0	15.0	13.0	15.0
13	22	20	15.0	15.0	13.0	15.0
14	22	20	15.0	15.0	13.0	15.0
15	23	20	15.0	15.0	13.0	15.0
16	22	19.0	15.0	15.0	13.0	15.0
17	22	18.0	15.0	15.0	13.0	15.0
18	20	17.0	14.0	14.0	14.0	16.0
19	22	15.0	14.0	14.0	14.0	16.0
20	17.0	15.0	14.0	14.0	14.0	16.0
21	18.0	16.0	14.0	14.0	14.0	15.0
22	20	17.0	14.0	14.0	14.0	16.0
23	23	17.0	14.0	14.0	14.0	15.0
24	22	17.0	14.0	14.0	15.0	15.0
25	20	18.0	14.0	14.0	15.0	15.0
26	22	18.0	14.0	14.0	14.0	15.0
27	24	18.0	15.0	14.0	14.0	15.0
28	25	18.0	14.0	14.0	15.0	15.0
29	22	19.0	14.0	15.0	15.0	15.0
30	20	19.0	14.0	15.0	15.0	15.0
31	---	19.0	---	14.0	16.0	---
Mean	25	18.0	15.0	14.0	14.0	15.0
Runoff acre-feet	1,492	1,150	901	904	861	912

Total = 6,220 acre-feet